

**KIPS**  
ENTRY TESTS  
**SERIES**

**PREP AND PRACTICE BOOK**  
**KIPSSATs**  
*Self Assessment Tests*



# LOGICAL REASONING

**National MDCAT**  
**AS PER PMC SYLLABUS**

- Topic-wise Complete Syllabus
- Detailed Explanation of Topics
- Comprehensive and Effective Practice Material
- Practice Questions with Answer Key
- Pre-Assessment Test (Diagnostic Test)
- Post-Assessment Test  
(Sample Paper as per Original Format)



A Kitab Dost Publication



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TOPIC WISE

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# PRE-ASSESSMENT TEST >>

Q.1 Find the missing term:

1G4, 9J16, 25M36, ?, 81S100

A. 64P49

B. 49P64

C. 49Q64

D. 49R64

Q.2 Look carefully at the sequence of symbols to find the pattern. Select correct option.

RЯR |RRЯ|ЯRЯ|?

A. RRR

B. ЯRR

C. RЯR

D. ЯЯR

Q.3 Statement:

Some towels are brushes. No brush is soap. All soaps are rats.

Conclusions:

- I) Some rats are brushes.
- II) No rat is brush.
- III) Some towels are soaps.

A. Only I

B. Only III

C. I, II and III are appropriate

D. I, II and III are inappropriate

Q.4 Statement:

Most CPU's are keyboards. No keyboard is a mouses. All mousses are CPU.

Conclusions:

- I) Some keyboards are CPU
- II) All CPU's are mouse
- III) No mouse is a keyboard
- IV) Some mouse are keyboard

A. Only I follows

B. Only I and III follows

C. Only II and III follows

D. Only II follows



**Question 5 to 6**

A, B, C, D, E, F and G are sitting on a wall and all of them are facing east. C is on the immediate right of D. B is at an extreme end and has E as his neighbour. G is between E and F. D is sitting to the right of E?

**Q.5 Who is sitting to the right of E?**

A. A

B. C

C. D

D. G

**Q.6 Which of the following pairs of people are sitting at the extreme ends?**

A. AB

B. AE

C. CB

D. FB

The only dark cloud in the economic horizon is the rather unsatisfactory foreign exchange and one may hope that the industry will play its role improving it by contributing to its export. The all-round progress of our company is continuing. I am happy to report that during the first half of the current year (April-Sep, 2019), there has been further improvement in its working.

**Q.7 The report is presented by the Chairman of the company to the share holders.**

A. True

B. Probably true

C. Insufficient data to say true or false

D. Probably false

E. False

**Q.8 Statements:**

I) Waleed performed badly in office.

II) Waleed lost his job.

A. Statement I is the cause and statement II is its effect

B. Statement II is the cause and statement I is its effect

C. both the statements I and II are independent causes

D. Both the statements I and II are independent causes

E. Both the statements I and II are effects of some common cause.



**Q.9 Statements:**

- I) The flood destroyed many homes.
  - II) The rainwater provided refuge from the drought condition.
- A. Statement I is the cause and statement II is its effect
  - B. Statement II is the cause and statement I is its effect
  - C. both the statements I and II are independent causes
  - D. Both the statements I and II are independent causes
  - E. Both the statements I and II are effects of some common cause.

**Q.10 Statement:** The inmates of jail X are very dangerous people.

**Courses of Action:**

- I) More security personnel should be deployed to guard the jail.
  - II) Some inmates should be shifted to a different jail.
- A. If only I is most appropriate
  - B. If only II is most appropriate
  - C. If either I or II is most appropriate
  - D. If neither I nor II is most appropriate
  - E. If both I and II are most appropriate

## ANSWER KEY»»

1	B	6	A
2	D	7	C
3	D	8	A
4	B	9	D
5	D	10	A



## INTRODUCTION

This chapter consists of questions in which series of numbers or alphabetical letters or combinations of both are given, which are generally called the terms of the series. These terms follow a certain pattern throughout the series. Furthermore, this chapter consists of problems regarding letters or figure series.

## TYPES

Following are the types of series completion:

Type - 1: Number series

Example

→ 8, 16, 32, 64, 128, ?

Type - 2: Alphabetical series

Example

→ B, D, F, H, J, L, ?    BZ, EW, HT, KQ, ?

Type - 3: Alpha-Numeric series

Example

→ 6, H, 9, K, 11, M, 14, P, 16, R, 19, U, 21, ?

## TYPE - 1: NUMBER SERIES

### CASE I: COMPLETING THE GIVEN SERIES BY FINDING THE MISSING TERM

#### ILLUSTRATIVE EXAMPLES (ADDITION)

Directions: Find the missing term in each of the following sequence:

Example-1:

3, 6, 9, 12, 15, ?

A. 16

B. 17

C. 18

D. 19

Solution:

Clearly, the given sequence follows the pattern: +3, +3, +3, +3, ...

Thus,  $3 + 3 = 6$ ,  $6 + 3 = 9$ , ...

So, missing term =  $15 + 3 = 18$ .

Hence, the answer is C.

Example-2:

2, 5, 10, 17, 26, ?

A. 29

B. 31

C. 35

D. 37



**Solution:**

Clearly, the given sequence follows the pattern:  $+3, +5, +7, +9, +11, \dots$

Thus,  $2 + 3 = 5$ ,  $5 + 5 = 10, \dots$

So, missing term  $= 26 + 11 = 37$ .

Hence, the answer is D.

**Example-3:**

**1, 3, 7, ?, 21, 31, 43**

A. 11

B. 13

C. 15

D. 17

**Solution:**

Clearly, the given sequence follows the pattern:  $+2, +4, +6, +8, +10, +12, \dots$

Thus,  $1 + 2 = 3$ ,  $3 + 4 = 7, \dots$

So, missing term  $= 7 + 6 = 13$ .

Hence, the answer is B.

**Example-4:**

**12, 14, 34, 36, 56, 58, 78, ?**

A. 98

B. 80

C. 90

D. 82

**Solution:**

Clearly, the given sequence follows the pattern:  $+2, +20, +2, +20, \dots$

Thus,  $12 + 2 = 14$ ,  $14 + 20 = 34, \dots$

So, missing term  $= 78 + 2 = 80$ .

Hence, the answer is B.

**Example-5:**

**6, 10, 18, 34, 66, ?**

A. 98

B. 126

C. 130

D. 132

**Solution:**

Clearly, the given sequence follows the pattern:  $+4, +8, +16, +32, \dots$

Thus,  $6 + 4 = 10$ ,  $10 + 8 = 18, \dots$

So, missing term  $= 66 + 64 = 130$ .

Hence, the answer is C.



Example-6:

1, 3, 3, 6, 7, 9, ?, 12, 21

A. 15

B. 11

C. 12

D. 13

Solution:

Clearly, the given sequence is a combination of two sequence:

I. 1, 3, 7, ?, 21

and

II. 3, 6, 9, 12

The pattern followed in I is +2, +4, ... and the pattern followed in II is +3.

So, missing number =  $7 + 6 = 13$ .

Hence, the answer is D.

## PRACTICE EXERCISE NUMBER SERIES (ADDITION)

**Directions:** In each of the following questions, a number sequence is given with one term missing. Choose the correct term that will continue the same pattern and replace the question mark in the given sequence.

Q.1 7, 12, 19, 28, ?

A. 39

B. 38

C. 40

D. 41

Q.2 0, 7, 15, 24, 34, ?

A. 55

B. 45

C. 46

D. 50

Q.3 87, 102, 119, 138, 159, ?

A. 184

B. 180

C. 182

D. 185

Q.4 2, 14, 32, 56, 86, ?

A. 120

B. 116

C. 128

D. 122

Q.5 2, 20, 42, 68, 98, ?

A. 132

B. 130

C. 134

D. 136



**Q.6 1,2,4,7,?,16**

A. 8

C. 9

B. 11

D. 13

**Q.7 45,54,47,?,49,56,51,57,53**

A. 48

C. 55

B. 50

D. 60

**Q.8 9,11,17,35,89,?**

A. 143

C. 250

B. 197

D. 251

**Q.9 6,8,10,14,18,26,34,50,66,?**

A. 98

C. 90

B. 82

D. 100

**Q.10  $\frac{1}{3}, \frac{3}{7}, \frac{6}{13}, \frac{10}{21}, \frac{15}{31}, ?$** A.  $\frac{21}{43}$ C.  $\frac{17}{35}$ B.  $\frac{43}{21}$ D.  $\frac{20}{41}$ **Q.11 71,25,83,37,95,49,?**

A. 61

C. 59

B. 107

D. 105

**Q.12 2,5,9,?,20,27**

A. 14

C. 18

B. 16

D. 24

**Q.13 4,6,12,14,28,30,?**

A. 32

C. 62

B. 60

D. 64

**Q.14 11,13,17,19,23,25,?**

A. 26

C. 29

B. 27

D. 37

**Q.15 6,11,21,36,56,?**

A. 42

C. 81

B. 51

D. 91



**NUMBER SERIES (SUBTRACTION)**

Q.16 5, 5, 3, -1, -7, ?

A. -15

B. 15

C. 0

D. -13

Q.17 17, 20, 19, 22, 21, 24, 23, ?

A. 22

B. 24

C. 26

D. 2

Q.18 2, 7, 5, 5, 8, 3, 11, ?

A. 1

B. 0

C. 2

D. 3

Q.19 2, -1, 2, -1, 2, ?

A. 2

B. -1

C. 5

D. 4

Q.20 180, 140, 179, 138, 177, 134, ?

A. 120

B. 174

C. 128

D. 175

**ANSWER KEY >>>**

1	A	6	B	11	B	16	A
2	B	7	C	12	A	17	C
3	C	8	D	13	B	18	A
4	D	9	A	14	C	19	B
5	A	10	A	15	C	20	B



**ILLUSTRATIVE EXAMPLES (MULTIPLICATION)**

Example-1:

1, 5, 25, 125, ?

A. 625

B. 650

C. 600

D. 725

Solution:

The terms are obtained by multiplying 5 with previous term.

So, missing term =  $125 \times 5 = 625$

**NUMBER SERIES (MULTIPLICATION)**

Directions: In each of the following questions, a number sequence is given with one term missing. Choose the correct term that will continue the same pattern and replace the question mark in the given sequence.

Q.1 8, 16, 32, 64, 128, ?

A. 256

B. 384

C. 250

D. 192

Q.2  $\frac{1}{32}, \frac{1}{16}, \frac{1}{4}, \frac{1}{2}, 2, 4, ?$

A. 8

B. 16

C. 12

D. 20

Q.3 2, 6, 18, 54, 162, ?

A. 486

B. 324

C. 243

D. 450

Q.4 4, 7, 15, 29, 59, 117, ?

A. 230

B. 233

C. 234

D. 235

Q.5 2, 6, 15, 34, 73, ?

A. 152

B. 150

C. 151

D. 153

Q.6 7, 13, 24, 45, 86, ?

A. 167

B. 169

C. 170

D. 172

Q.7 2, 4, 8, 32, ?

A. 256

B. 512

C. 1024

D. 120



PMC Topic-1

- Q.8 3,10,33,104,?  
A. 310  
C. 319  
B. 312  
D. 315
- Q.9 4,12,36,108,?  
A. 144  
C. 304  
B. 216  
D. 324
- Q.10 1,1,2,6,24,?,720  
A. 100  
C. 108  
B. 104  
D. 120
- Q.11 1000,500,250,?  
A. 50  
C. 100  
B. 125  
D. 150
- Q.12 240,?,120,40,10,2  
A. 120  
C. 200  
B. 180  
D. 240
- Q.13 156,76,36,16,?  
A. 6  
C. 10  
B. 8  
D. 12
- Q.14 48,24,96,48,192,?  
A. 76  
C. 96  
B. 90  
D. 98
- Q.15 6,13,28,59,?  
A. 111  
C. 114  
B. 113  
D. 122

# ANSWER KEY»

1	A	6	A	11	B
2	B	7	A	12	D
3	A	8	C	13	A
4	D	9	D	14	C
5	A	10	D	15	D



**ILLUSTRATIVE EXAMPLES (SQUARES/CUBES)**

**Example-1:** 1, 4, 9, 16, 25, 36, ?

A. 64

B. 49

C. 81

D. 100

**Solution:**

Clearly, the given sequence consists of squares of numbers 1, 2, 3, ... i.e.,  $1^2, 2^2, 3^2, \dots$

So, missing term =  $7^2 = 49$ .

Hence, the answer is B.

**Example-2:**

1, 4, 27, 16, ?, 36, 343

A. 25

B. 87

C. 120

D. 125

**Solution:**

Clearly, the given sequence consists of cubes of odd numbers and squares of even numbers, i.e.,  $1^3, 2^2, 3^3, 4^2, \dots$

So, missing term =  $5^3 = 125$ .

Hence, the answer is D.

**NUMBER SERIES (SQUARES/CUBES)**

**Directions:** In each of the following questions, a number sequence is given with one term missing. Choose the correct term that will continue the same pattern and replace the question mark in the given sequence.

**Q.1** 63, 37, 15, 5, ?

A. -1

B. 0

C. 1

D. 2

**Q.2** 0, 3, 8, 15, ?

A. 25

B. 24

C. 35

D. 36

**Q.3** 0, 6, 24, 60, 120, 210, ?

A. 336

B. 343

C. 340

D. 315



Q.4 0, 8, ?, 48, 80, 120

A. 25

B. 16

C. 32

D. 24

Q.5 7, 26, 63, 124, ?

A. 216

B. 215

C. 248

D. 210

Q.6 5, 10, 17, 26, 37, 50, ?

A. 64

B. 65

C. 63

D. 66

Q.7 3, 9, 15, ?

A. 32

B. 33

C. 31

D. 30

Q.8 1, 5, 14, 30, 55, 91, ?

A. 130

B. 140

C. 150

D. 160

Q.9 198, 194, 185, 169, ?

A. 92

B. 112

C. 136

D. 144

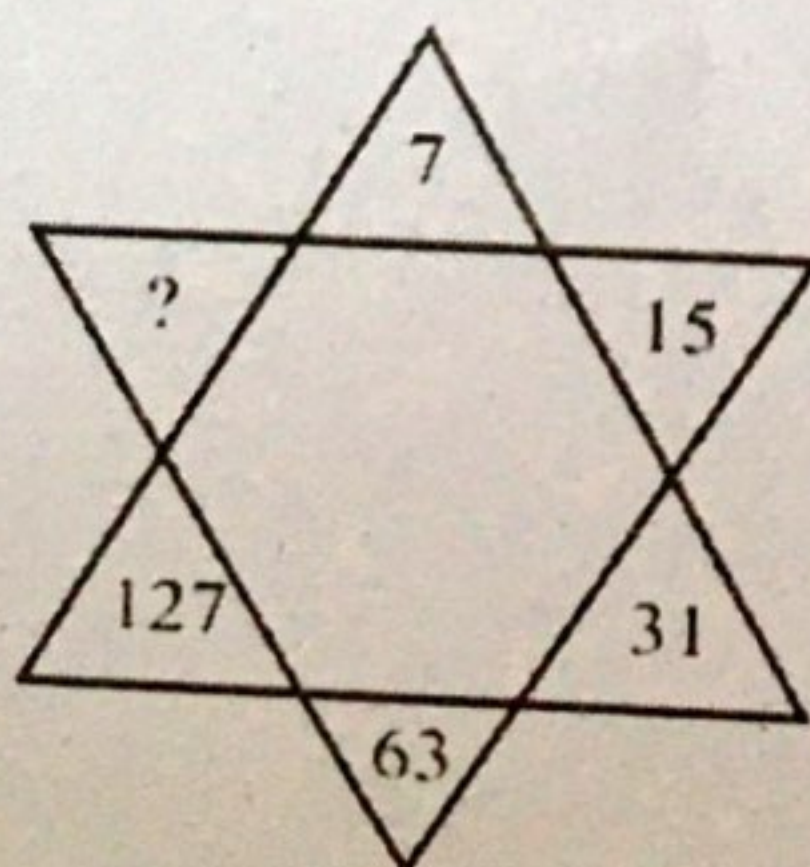
Q.10 2, 2, 5, 13, 28, ?

A. 49

B. 50

C. 51

D. 52



Q.11

A. 190

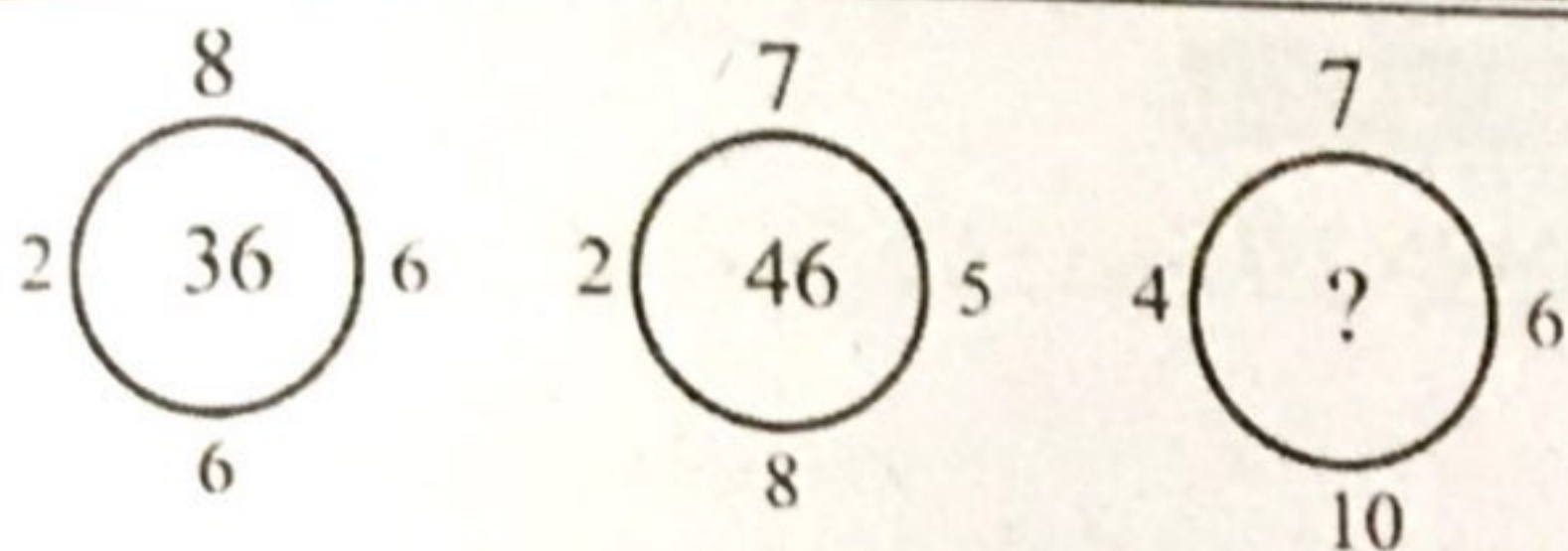
B. 221

C. 236

D. 255



Q.12



A. 42

B. 46

C. 48

D. 50

Q.13

6	6	8
5	7	5
4	3	?
120	126	320

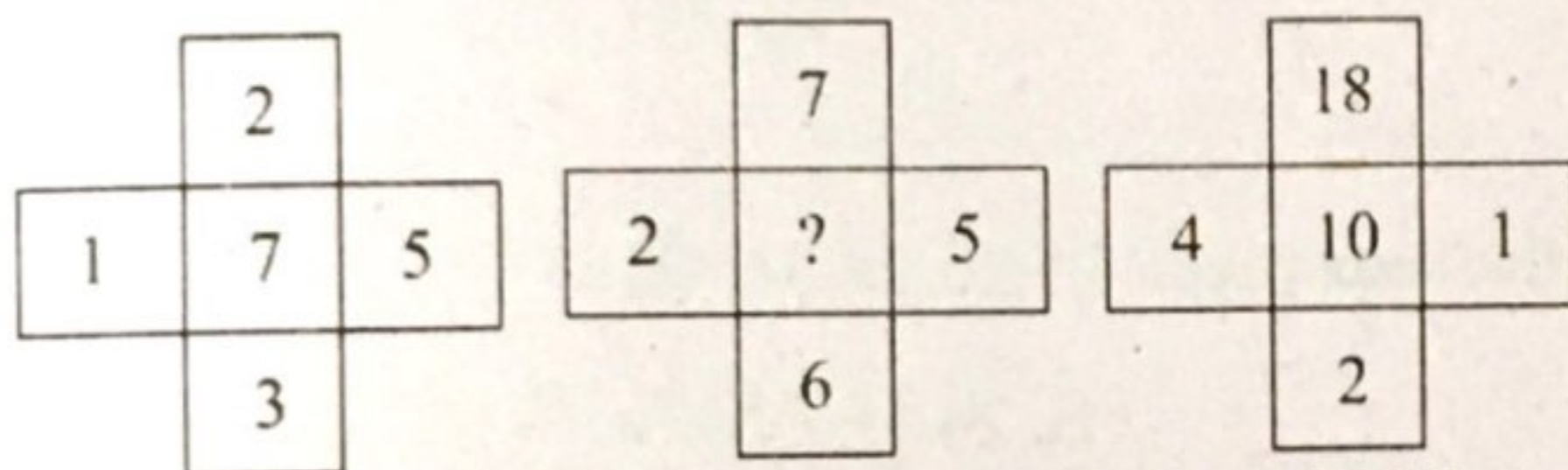
A. 4

B. 8

C. 12

D. 16

Q.14 Insert the missing number:



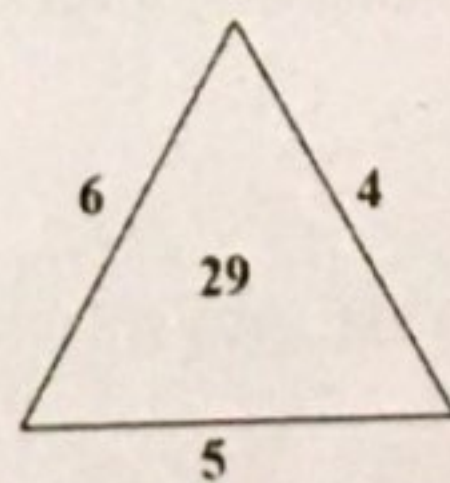
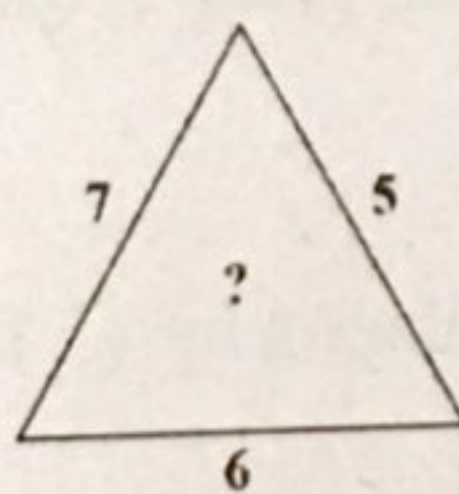
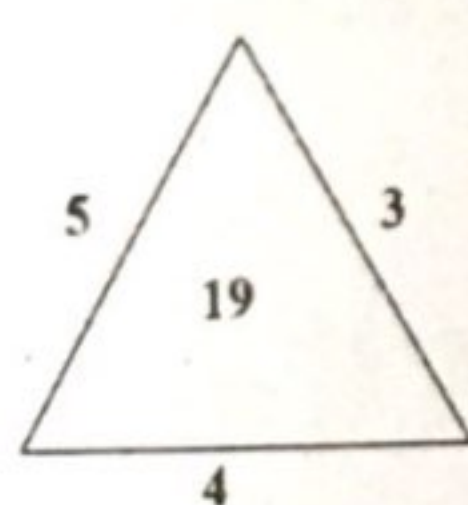
A. 5

B. 19

C. 27

D. 23

Q.15 Insert the missing number:



A. 25

B. 37

C. 41

D. 47

**ANSWER KEY»»**

1	A	6	B	11	D
2	B	7	B	12	B
3	A	8	B	13	B
4	D	9	D	14	D
5	B	10	D	15	C



**ILLUSTRATIVE EXAMPLES (WRONG TERM)**

**Case II: FINDING THE WRONG TERM IN THE GIVEN SERIES**

**Example-1:**

Find the wrong number in the sequence: 7, 26, 63, 126, 215, 342, 511

A. 7

B. 26

C. 126

D. 215

**Solution:**

Clearly, the correct sequence is:

$$2^3 - 1, 3^3 - 1, 4^3 - 1, 5^3 - 1, 6^3 - 1, 7^3 - 1, 8^3 - 1.$$

So, 126 is wrong and should be replaced by  $(5^3 - 1)$  i.e. 124.

Hence, the answer is C.

**Example-2:**

Find the wrong number in the sequence: 3, 8, 15, 24, 34, 48, 63

A. 15

B. 24

C. 34

D. 48

**Solution:**

The difference between consecutive terms of the given sequence are respectively 5, 7, 9, 11, 13 and 15.

Clearly, 34 is a wrong number and must be replaced by  $(24 + 11)$  i.e. 35.

Hence, the answer is C.

**NUMBER SERIES (WRONG TERM)**

**Directions:** In each of the following questions, one term in the number sequence is wrong. Find out the wrong term.

**Q.1** 196, 169, 144, 121, 101

A. 101

B. 121

C. 169

D. 196

**Q.2** 2, 5, 10, 17, 26, 37, 50, 64

A. 17

B. 26

C. 37

D. 64



Q.3 5, 27, 61, 122, 213, 340, 509

A. 27

B. 61

C. 122

D. 509

Q.4 125, 126, 124, 127, 123, 129

A. 126

B. 124

C. 123

D. 129

Q.5 105, 85, 60, 30, 0, -45, -90

A. 105

B. 60

C. 0

D. -45

Q.6 2, 5, 10, 50, 500, 5000

A. 5

B. 10

C. 50

D. 5000

Q.7 3, 7, 15, 39, 63, 127, 255, 511

A. 15

B. 39

C. 63

D. 127

Q.8 3, 2, 8, 9, 13, 22, 18, 32, 23, 42

A. 8

B. 9

C. 13

D. 22

Q.9 1, 2, 5, 10, 17, 28

A. 30

B. 28

C. 27

D. 17

Q.10 2, 3, 5, 8, 13, 34

A. 21

B. 25

C. 29

D. 34

## ANSWER KEY»

1	A	6	D
2	D	7	B
3	A	8	B
4	D	9	B
5	C	10	D



## TYPE - 2: ALPHABETICAL SERIES

### INTRODUCTION

In this type of questions, a sequence of single, pairs or groups of letters is given. The terms of the sequence form a certain pattern according to the position of the letters in the English alphabet. So, in this type we have to identify the pattern of alphabetical letters and find the missing term in the given sequence.

### ILLUSTRATIVE EXAMPLES

**Example - 1.** Find the next two terms in the sequence: A, C, F, J, ?, ?

A. L, P

B. M, O

C. O, U

D. R, V

**Solution:**

Clearly, the first, second, third,... letters of the sequence are respectively moved two, three, four,... steps forward to obtain the successive terms of the sequence.

Thus, the fifth term in the sequence must be a letter which is five steps ahead of J i.e. O, while the sixth term must be a letter six steps ahead of O i.e. U.

Thus, we have the following pattern:

$A \xrightarrow{+2} C \xrightarrow{+3} F \xrightarrow{+4} J \xrightarrow{+5} O \xrightarrow{+6} U$

So, the missing terms are O and U. Hence, the answer is C.

**Example - 2.** Which term comes next in the sequence: AC, FH, KM, PR, ?

A. UW

B. VW

C. UX

D. TV

**Solution:**

Clearly, the first and second letters of each term are moved five steps forward to obtain the corresponding letters of the next term.

Thus, the first letter of the missing term must be five steps ahead of P i.e. U, while the second letter must be five steps ahead of R i.e. W.

So, the missing term is UW. Hence, the answer is A.

**Example - 3.** Which term comes next in the sequence: YEB, WFD, UHG, SKI, ?

A. QOL

B. QGL

C. TOL

D. QNL

**Solution:**

Clearly, we observe the following pattern in the first, second and third letters of the given sequence:

1<sup>st</sup> letter:  $Y \xrightarrow{-2} W \xrightarrow{-2} U \xrightarrow{-2} S \xrightarrow{-2} \boxed{Q}$

2<sup>nd</sup> letter:  $E \xrightarrow{+1} F \xrightarrow{+2} H \xrightarrow{+3} K \xrightarrow{+4} \boxed{O}$

3<sup>rd</sup> letter:  $B \xrightarrow{+2} D \xrightarrow{+3} G \xrightarrow{+2} I \xrightarrow{+3} \boxed{L}$

Thus, the missing term is QOL. Hence, the answer is A.



# ALPHABET SERIES

Directions:

In each of the following questions, various terms of an alphabet sequence are given with one or more terms missing as shown by (?). Choose the missing term(s).

Q.1 E, H, K, N, Q, T, ?

A. W

B. X

C. Y

D. Z

Q.2 A, Y, W, U, S, Q, ?

A. I

B. K

C. M

D. O

Q.3 F, G, I, L, P, ?

A. T

B. V

C. U

D. Z

Q.4 F, I, M, P, T, W, ?

A. A

B. Z

C. C

D. B

Q.5 B, C, E, G, K, ?

A. L

B. N

C. M

D. O

Q.6 O, R, M, T, K, V, I, ?

A. W

B. X

C. Y

D. Z

Q.7 C, F, K, R, ?

A. Y

B. Z

C. A

D. B

Q.8 N, N, P, L, S, I, W, ?

A. B

B. C

C. D

D. E

Q.9 T, Q, M, H, ?

A. Z

B. Y

C. B

D. A



PMC Topic-1

Q.10 X, U, Q, N, J, G, ?

A. C

C. A

B. B

D. D

Q.11 R, U, X, A, D, ?

A. F

C. H

B. G

D. I

Q.12 B, D, F, I, L, P, ?

A. R

C. T

B. S

D. U

Q.13 U, B, I, P, W, ?

A. D

C. Q

B. F

D. Z

Q.14 Z, ?, T, ?, N, ?, H, ?, B

A. W, Q, K, E

C. X, Q, K, E

B. W, R, K, E

D. X, R, K, E

Q.15 A, I, P, V, A, E, ?

A. E

C. G

B. F

D. H

Q.16 Y, W, T, P, K, E, X, ?, ?

A. G, H

C. R, G

B. P, G

D. S, R

Q.17 Z, S, W, O, T, K, Q, G, ?, ?

A. N, C

C. O, C

B. N, D

D. O, D

Q.18 BZ, EW, HT, KQ, ?

A. NN

C. NO

B. MN

D. MP

Q.19 AZ, DX, HU, MQ, ?

A. SL

C. TL

B. SM

D. RL



**Q.20** AZ, CX, FU, ?

A. IR

B. IV

. JQ

D. KP

**Q.21** ZYY, WUT, TQO, QMJ, ?

A. NJE

B. MIE

C. MIF

D. NIE

**Q.22** PMT, OOS, NQR, MSQ, ?

A. LUP

B. LVP

C. LVR

D. LWP

**Q.23** BMX, DNW, FOU, ?

A. GHO

B. GPS

C. HPS

D. HPT

**Q.24** BZA, DYC, FXE, ?, JVI

A. HUG

B. HWG

C. UHG

D. WHG

**Q.25** ABD, DGK, HMS, MTB, SBL, ?

A. XKW

B. ZAB

C. ZKU

D. ZKW

**Q.26** WFB, TGD, QHG, ?

A. NIJ

B. NIK

C. NJK

D. OIK

**Q.27** AYD, BVF, DRH, ?, KGL

A. FMI

B. GMJ

C. GLJ

D. HLK



Q.28 AB, DEF, HIJK, ?, STUVWX

A. LMNO

B. LMNOP

C. MNOPQ

D. QRSTU

Q.29 BCDE, CEGI, DGJM, EIMQ, ?

A. FKQV

B. FKPU

C. GPOU

D. GOPV

Q.30 CDEF, DFHJ, EHKN, FJNR, ?

A. GLRW

B. GLOX

C. GLQV

D. HPQW

Q.31

A	D	G
D	I	N
I	P	?

A. V

B. W

C. X

D. Y

Q.32

F	I	O
A	J	K
E	M	?

A. P

B. R

C. S

D. V

Q.33 Find the missing character from the given alternatives.

A	D	H
F	I	M
?	N	R

A. K

B. N

C. O

D. P



Q.34 Find the missing character from the given alternatives.

F	W	O
A	J	K
E	M	?

A. N

B. X

C. D

D. P

Q.35 Find the missing character from the given alternatives.

H	K	Q
C	G	O
E	J	?

A. T

B. P

C. N

D. L

## ANSWER KEY»

1	A	11	B	21	D	31	B
2	D	12	C	22	A	32	B
3	C	13	A	23	D	33	A
4	A	14	A	24	B	34	C
5	C	15	D	25	D	35	A
6	B	16	B	26	B		
7	C	17	A	27	B		
8	D	18	A	28	C		
9	C	19	A	29	B		
10	A	20	C	30	C		



# TYPE - 3: ALPHA-NUMERIC SERIES

## INTRODUCTION

This type of questions is just a jumbled form of questions of Type 1 and Type 2, which you have just read. Here, the terms of the given sequence are a combination of letters and numerals, which move according to a set pattern.

Study the following examples:

## ILLUSTRATIVE EXAMPLES

**Example-1.** Find the next term in the alpha-numeric sequence:

**Z5A, X4D, V6G, T3J, R7M, P2P?**

A. N8S

B. N4T

C. T6N

D. T2N

**Solution:**

Clearly, the patterns followed by the letters are as follows:

1<sup>st</sup> letter:  $Z \xrightarrow{-2} X \xrightarrow{-2} V \xrightarrow{-2} T \xrightarrow{-2} R \xrightarrow{-2} P \xrightarrow{-2} \boxed{N}$

2<sup>nd</sup> letter:  $A \xrightarrow{+3} D \xrightarrow{+3} G \xrightarrow{+3} J \xrightarrow{+3} M \xrightarrow{+3} P \xrightarrow{+3} \boxed{S}$

Number:  $5 \xrightarrow{-1} 4 \xrightarrow{+2} 6 \xrightarrow{-3} 3 \xrightarrow{+4} 7 \xrightarrow{-5} 2 \xrightarrow{+6} 8$

Hence, desired term is N8S.

So, the answer is A..

**Example-2.** Find the term which does not fit into the sequence given below:

**G2T, J3R, M5P, P7N, S8L**

A. G2T

B. S8L

C. M5P

D. P7N

**Solution:**

The patterns followed by the letters are:

1<sup>st</sup> letter:  $G \xrightarrow{+3} J \xrightarrow{+3} M \xrightarrow{+3} P \xrightarrow{+3} S$

3<sup>rd</sup> letter:  $T \xrightarrow{-2} R \xrightarrow{-2} P \xrightarrow{-2} N \xrightarrow{-2} L$

The numbers are prime numbers so, instead of 8, there has to be 11.

Thus, the term S8L does not fit in the given sequence. The correct term is S11L.

Hence, the answer is B.



**ALPHA-NUMERIC SERIES**

Directions:

In each of the following questions, a letter number sequence is given with one or more terms missing as shown by (?). Choose the missing term(s).

Q.1 D-4, F-6, H-8, J-10, ?, ?

A. K-12, M-13

B. L-12, M-14

C. L-12, N-14

D. K-12, M-14

Q.2 2B, 4C, 8E, 14H, ?

A. 16K

B. 20I

C. 20L

D. 22L

Q.3 3F, 6G, 11I, 18L, ?

A. 21O

B. 25N

C. 25P

D. 27P

Q.4 W-144, ?, S-100, Q-81, O-64

A. U-121

B. U-122

C. V-121

D. V-128

Q.5 2, A, 9, B, 6, C, 13, D, ?

A. 9

B. 10

C. 12

D. 19

Q.6 KM5, IP8, GS11, EV14, ?

A. BX17

B. BY17

C. CY17

D. CY18

Q.7 C4X, F9U, I16R, ?

A. K25P

B. L25P

C. L25O

D. L27P

Q.8 2A11, 4D13, 12G17, ?

A. 36I19

B. 36J21

C. 48J21

D. 48J23

Q.9 6, H, 9, K, 11, M, 14, P, 16, R, 19, U, 21, ?, ?

A. W, 24

B. X, 23

C. Y, 22

D. Z, 25



Q.10 Find the term which does not fit into the sequence:

1CV, 5FU, 9IT, 15LS, 17OR

A. 5FU

B. 15LS

C. 9IT

D. 17OR

## ANSWER KEY

1	C	6	C
2	D	7	C
3	D	8	D
4	A	9	A
5	B	10	B

## SYMBOL SERIES

### INTRODUCTION

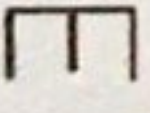
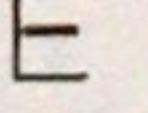
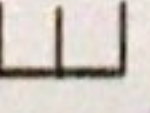
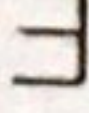
In the symbol series problems, sometimes a pair of related figures is provided and a similar relationship is to be established between two other figures or there is a sequence of figures depicting a change step by step. We have to identify the correct pattern and choose the right option.

### ILLUSTRATIVE EXAMPLE

Directions:

Look carefully at the sequence of symbols to find the pattern. Select correct pattern.

E M E | M M M | E W E | W ? W

(1)

(2)

(3)

(4)

A. 1

B. 2

C. 3

D. 4

Solution:

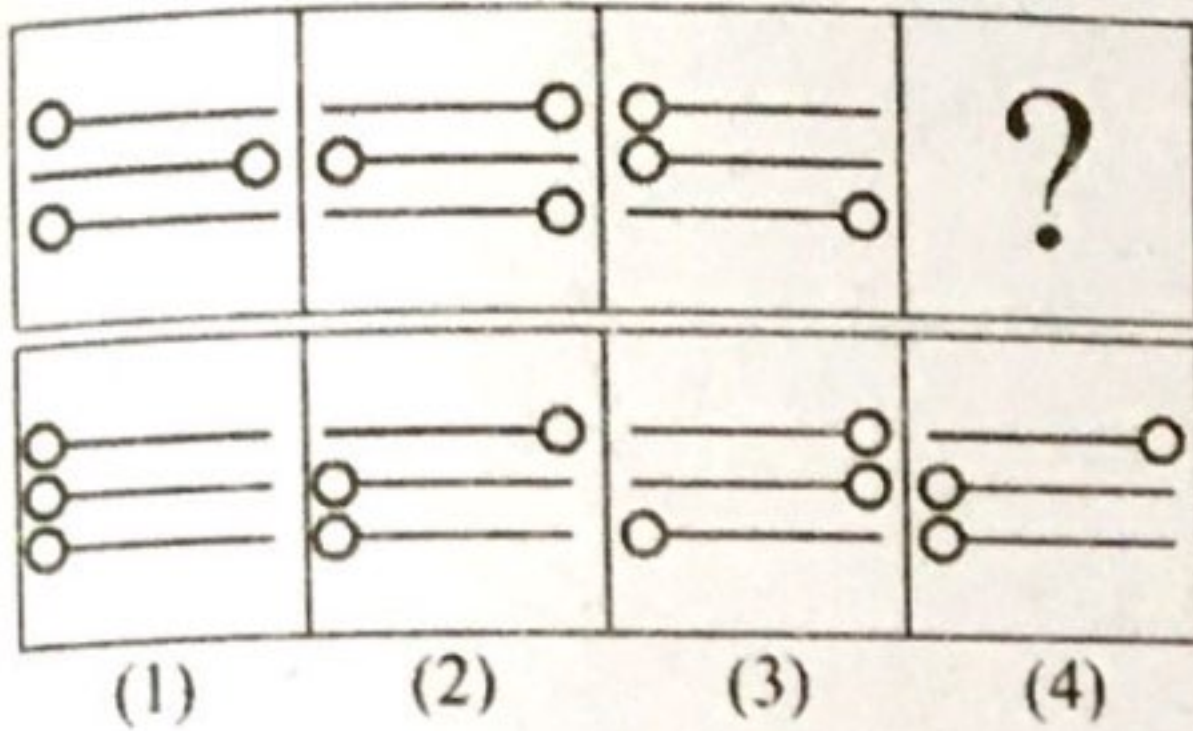
This is an alternating series. In the first segment, the letter "E" faces right, then down, then right. In the second segment, the letters all face down. To follow this pattern, in the fourth segment, the letters must all face up.

So, the correct option is C.



# PRACTICE EXERCISE

Directions: Look carefully at the sequence of symbols to find the pattern. Select correct pattern.



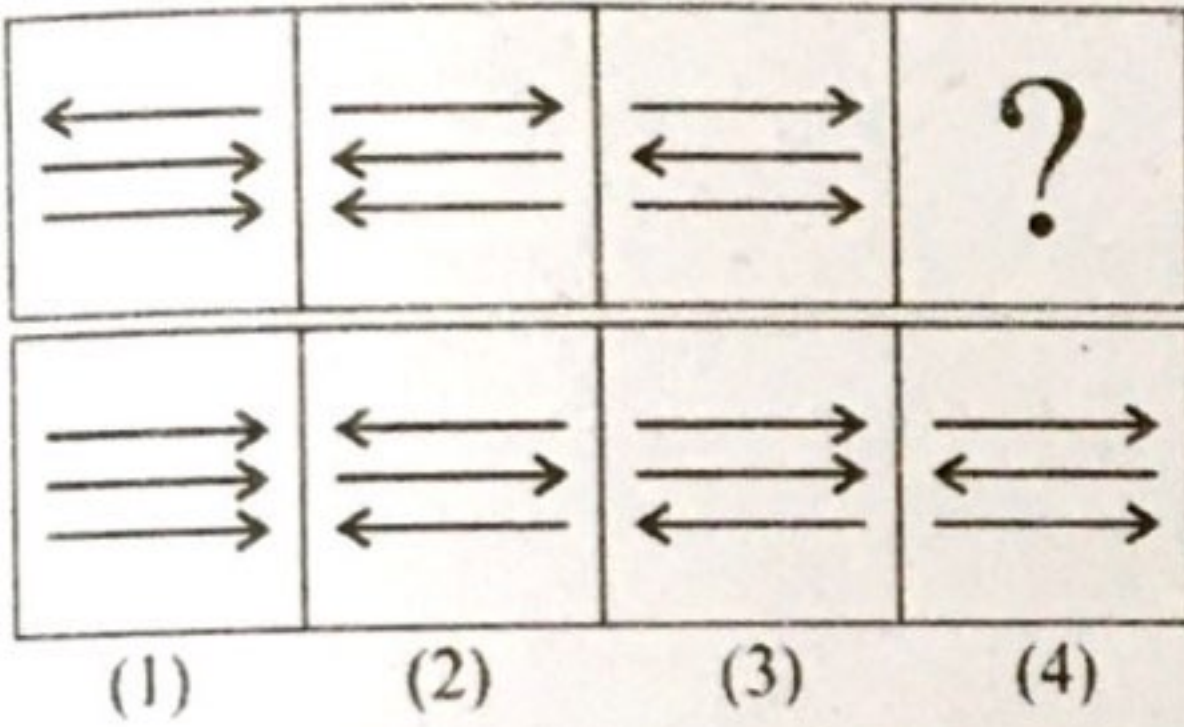
Q.1

A. 1

B. 2

C. 3

D. 4



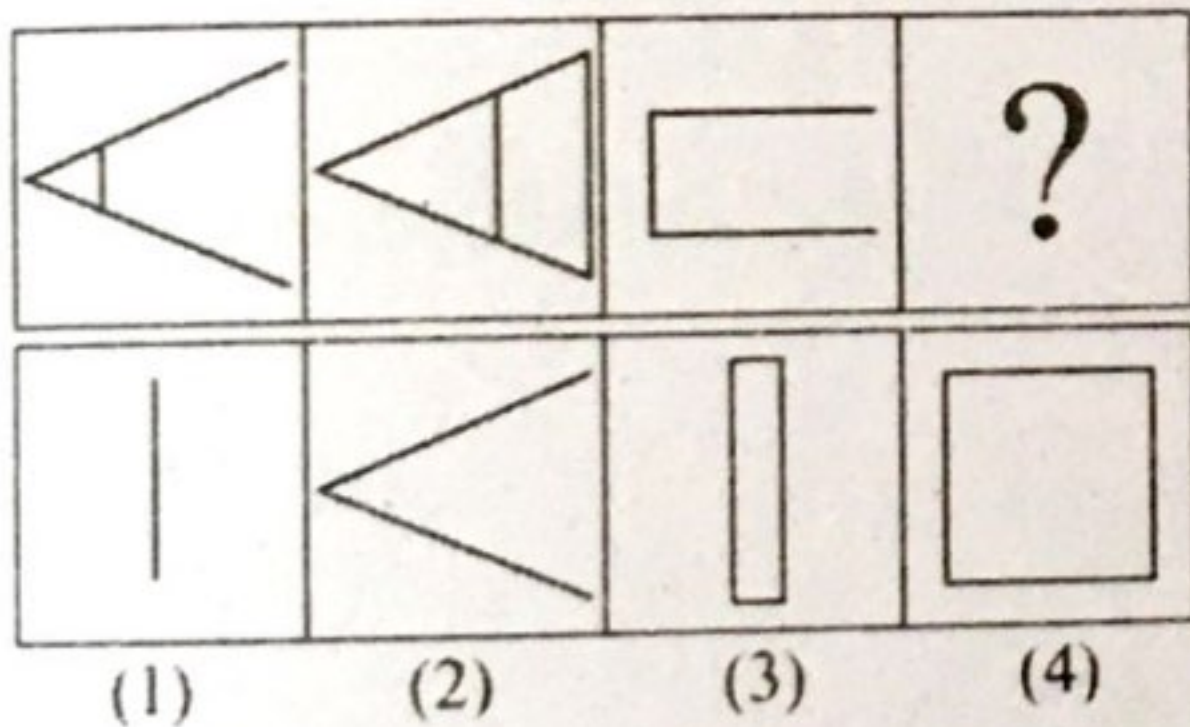
Q.2

A. 1

B. 2

C. 3

D. 4



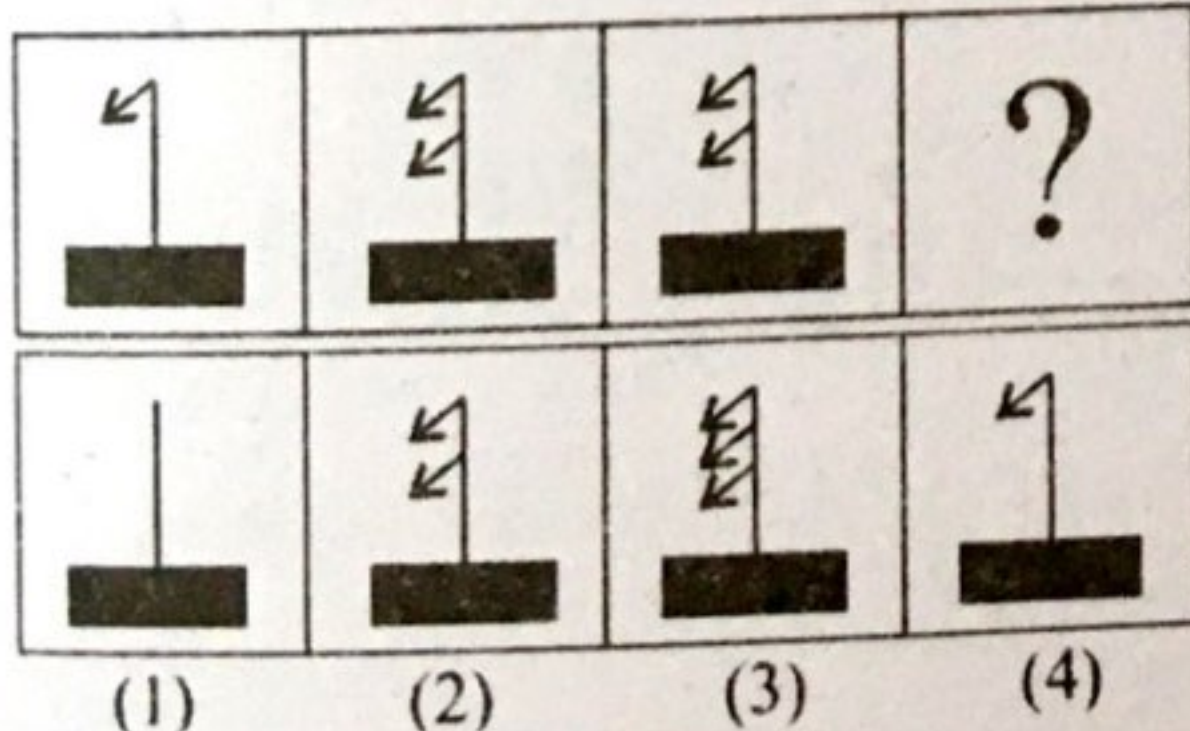
Q.3

A. 1

B. 2

C. 3

D. 4



Q.4

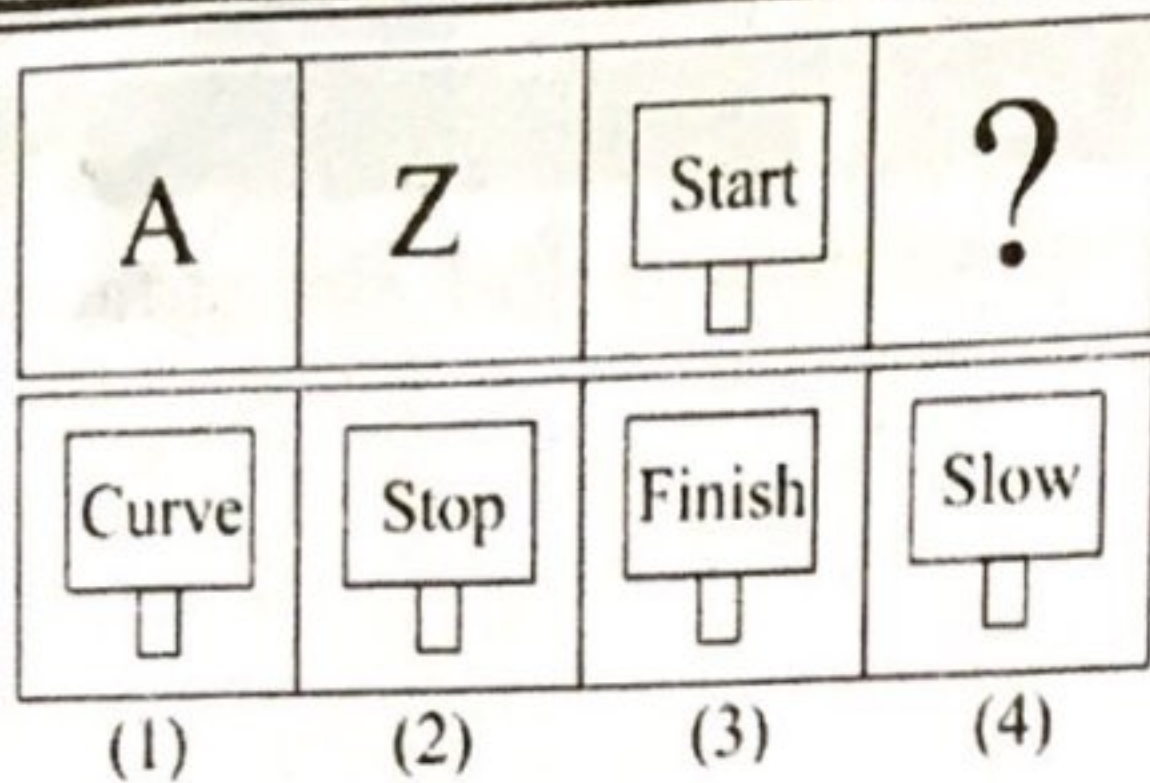
A. 1

B. 2

C. 3

D. 4





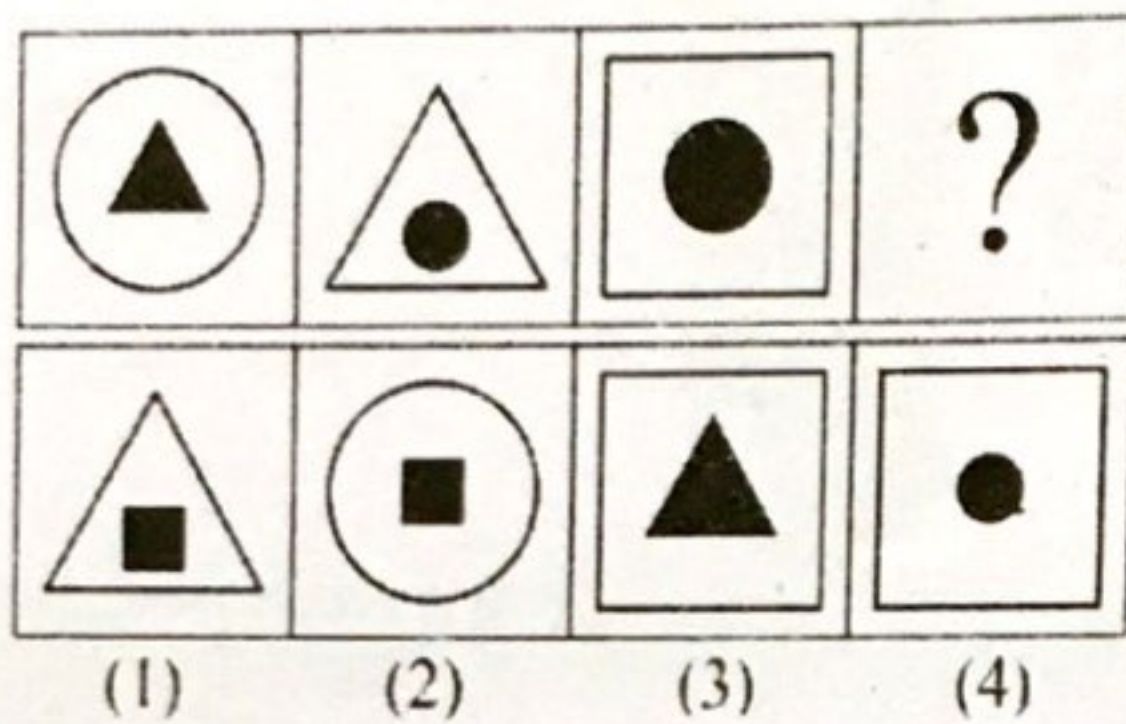
Q. 5

A. 1

B. 2

C. 3

D. 4



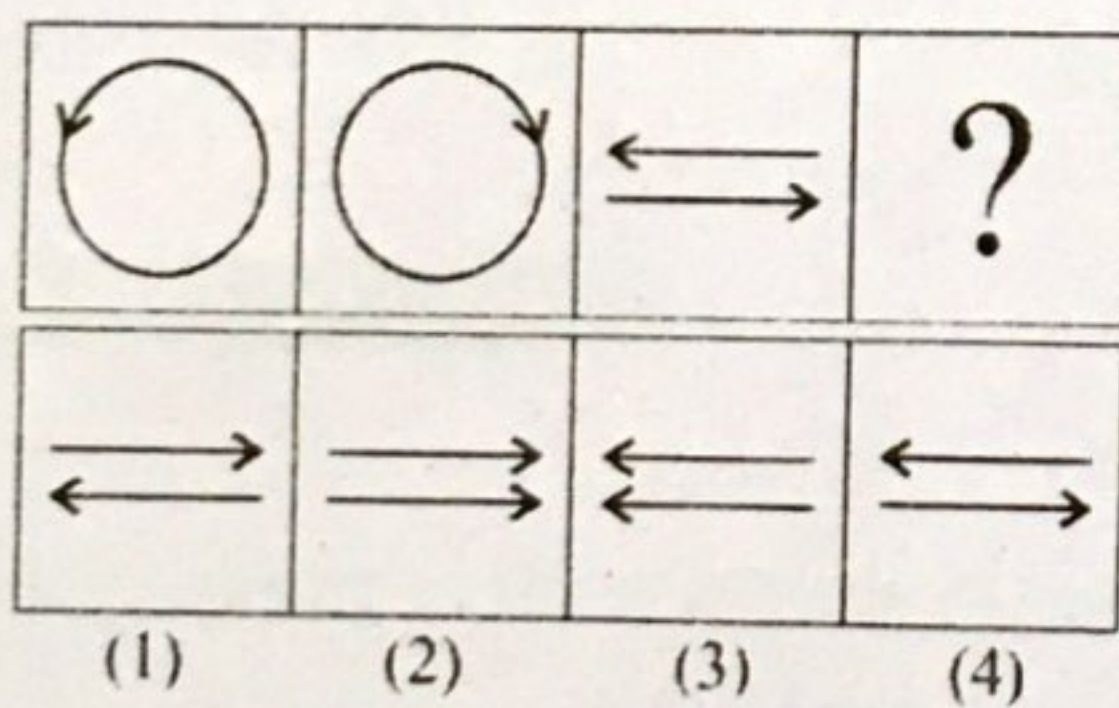
Q. 6

A. 1

B. 2

C. 3

D. 4



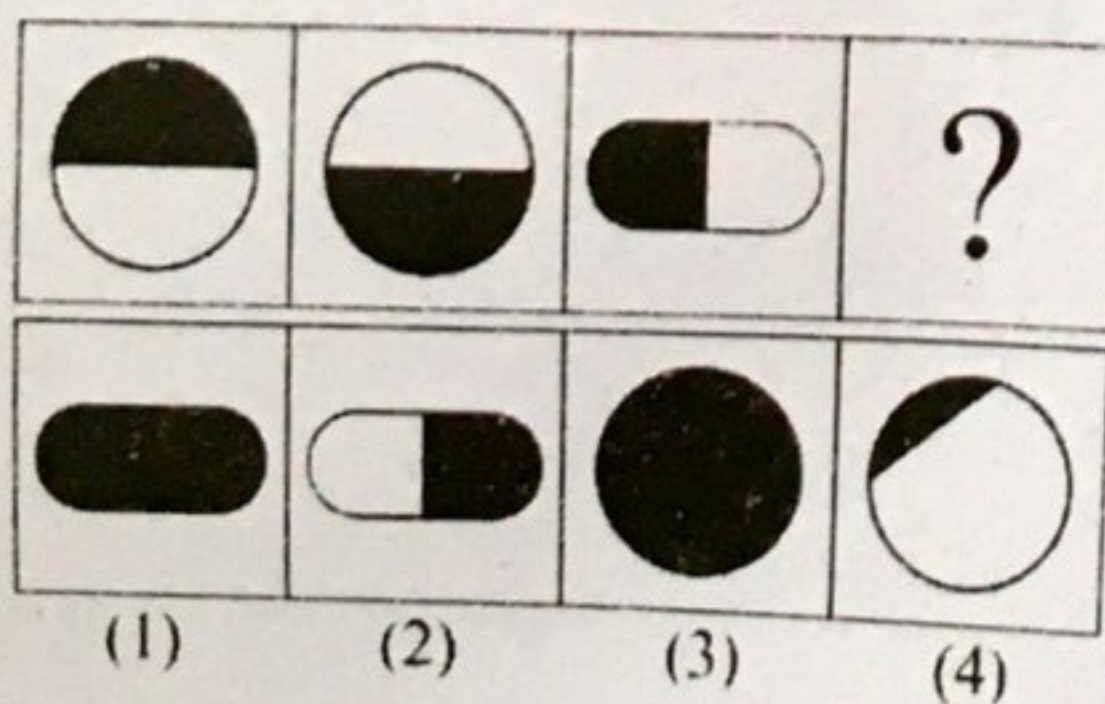
Q. 7

A. 1

B. 2

C. 3

D. 4



Q. 8

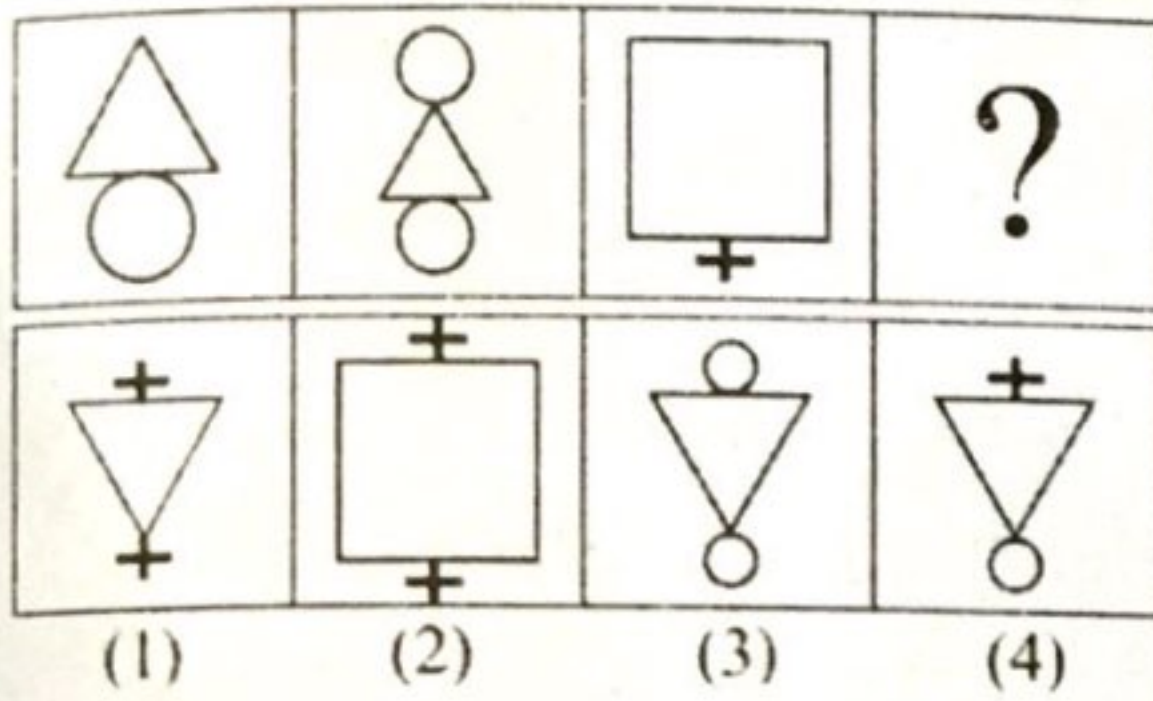
A. 1

B. 2

C. 3

D. 4





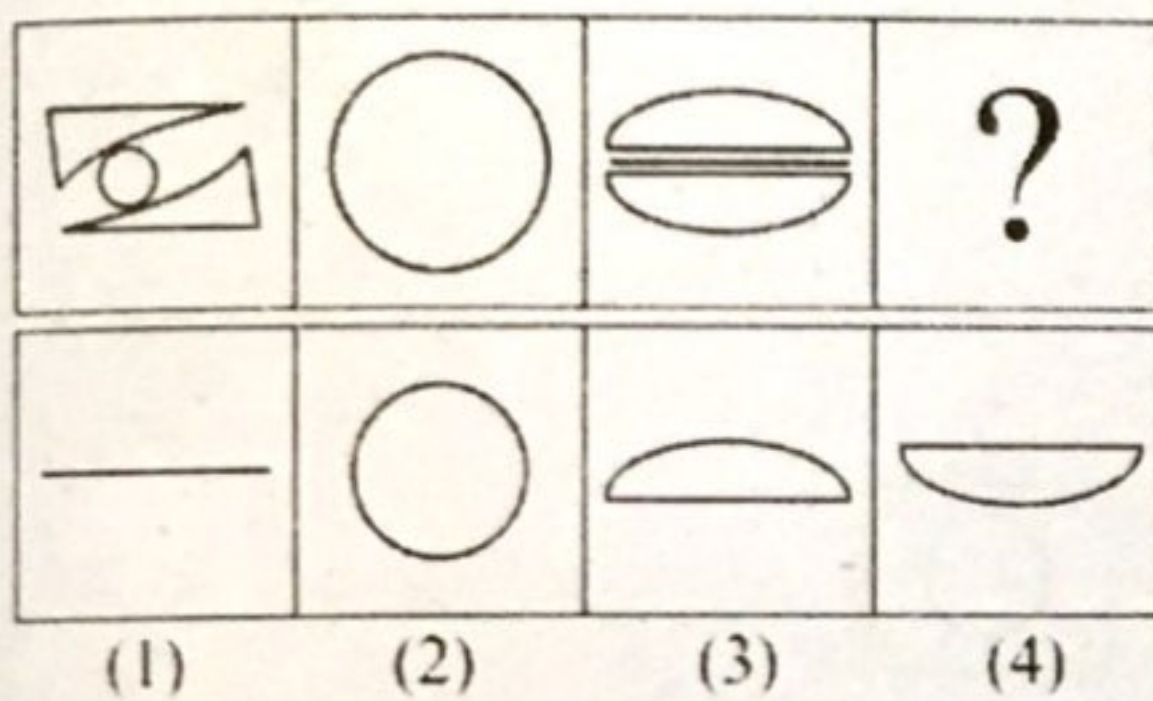
Q. 9

A. 1

B. 2

C. 3

D. 4



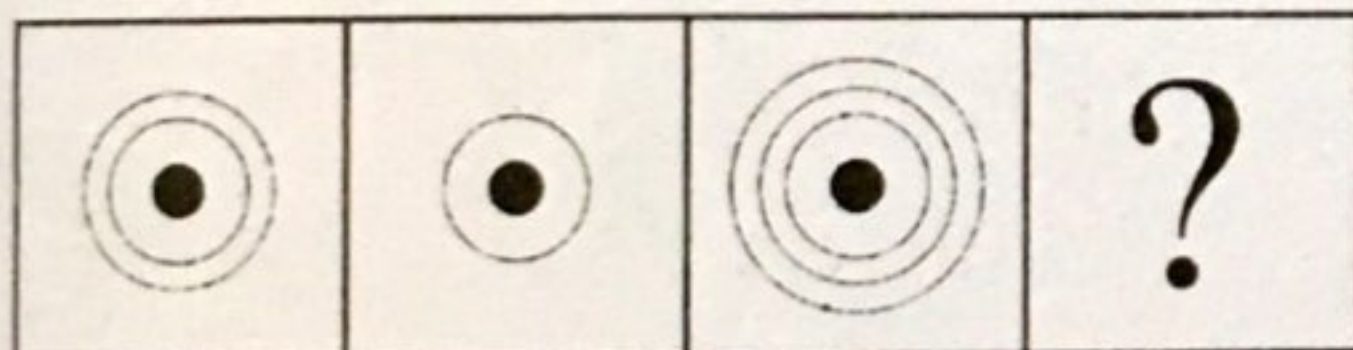
Q. 10

A. 1

B. 2

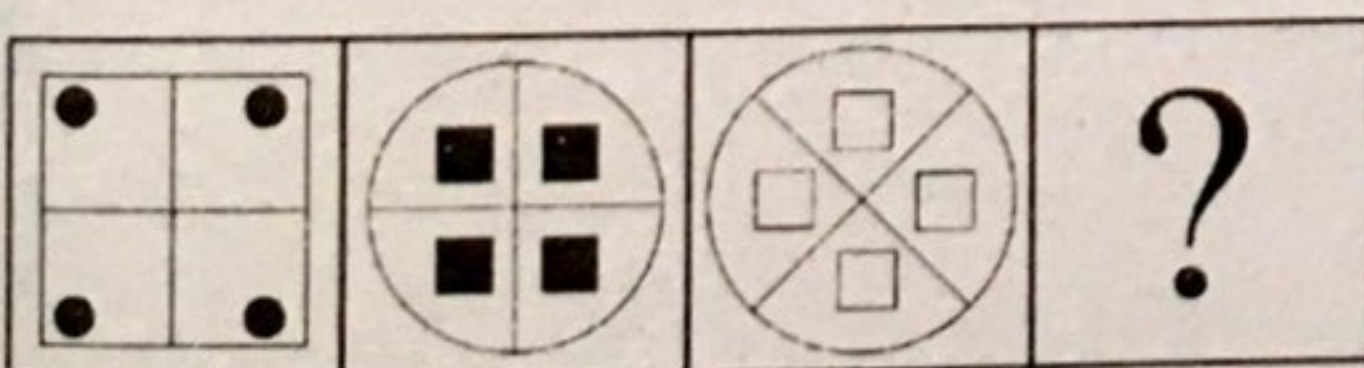
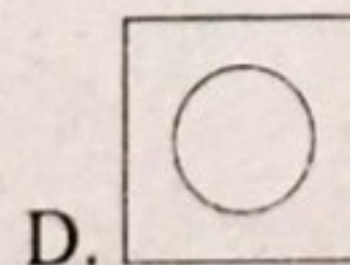
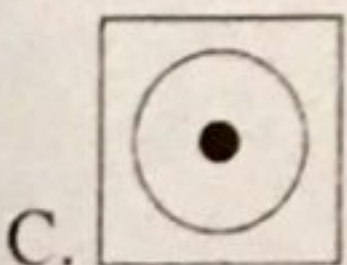
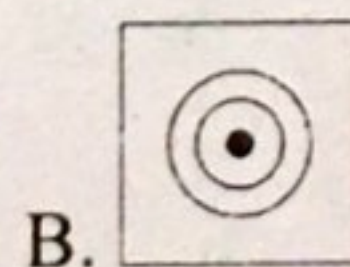
C. 3

D. 4

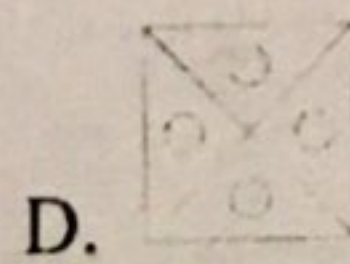
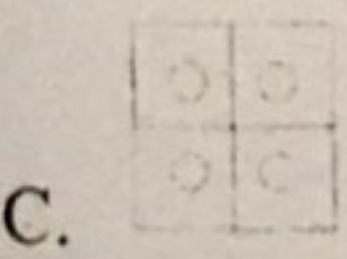
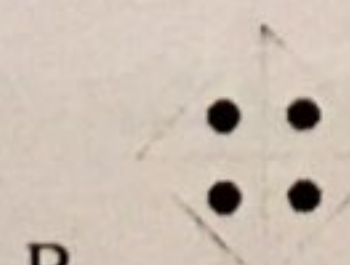
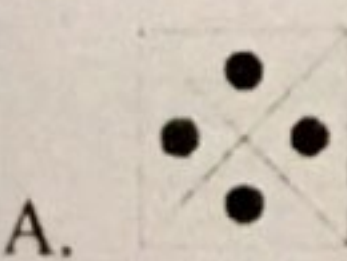


Q. 11

Which is the missing tile?

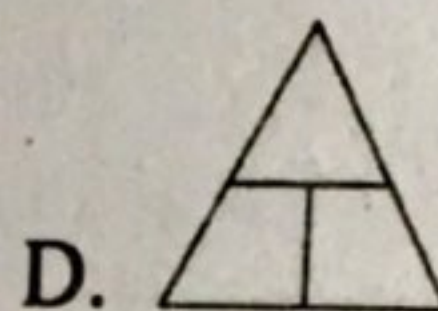
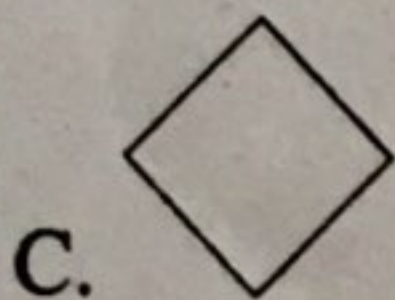
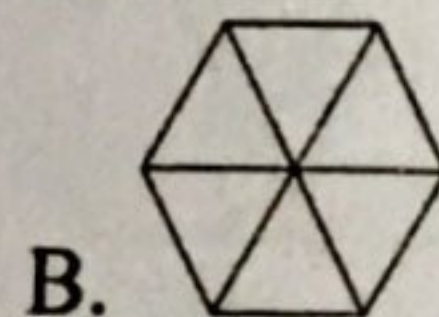
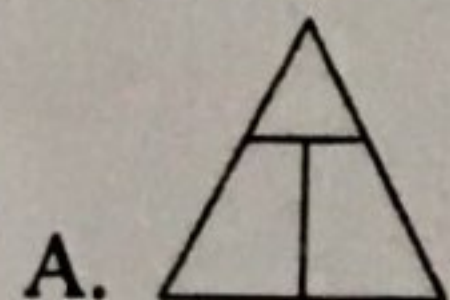
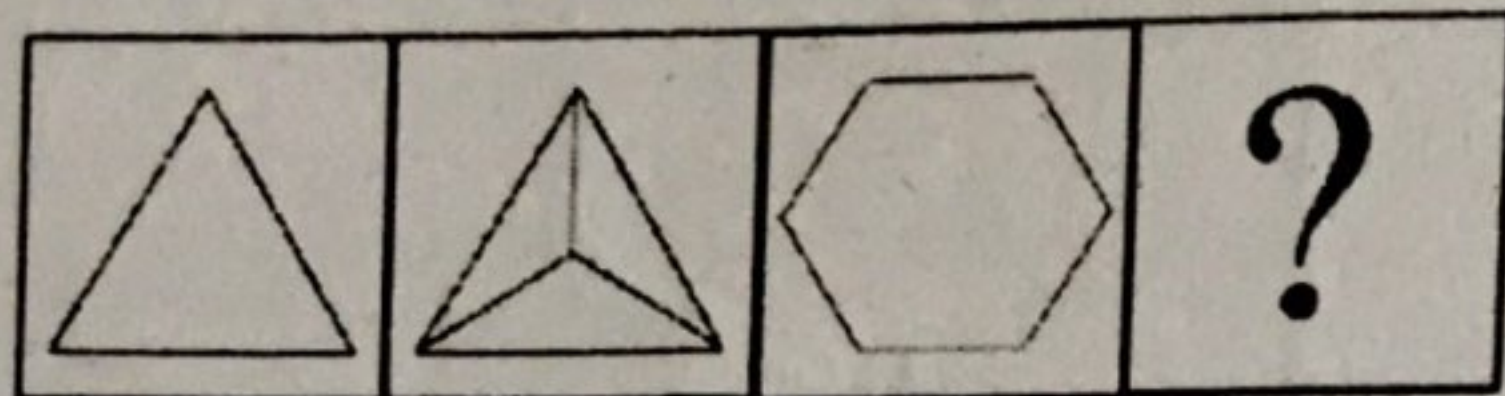


Q. 12

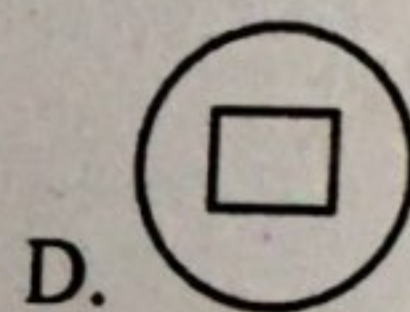
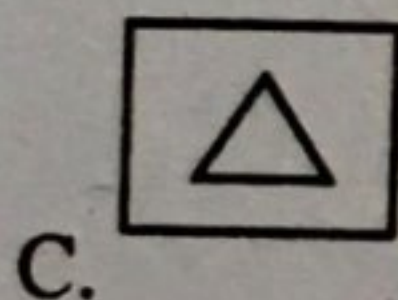
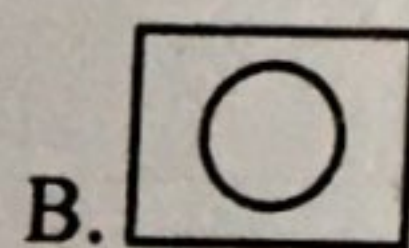
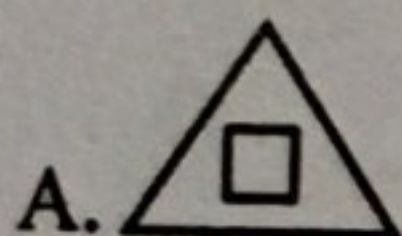
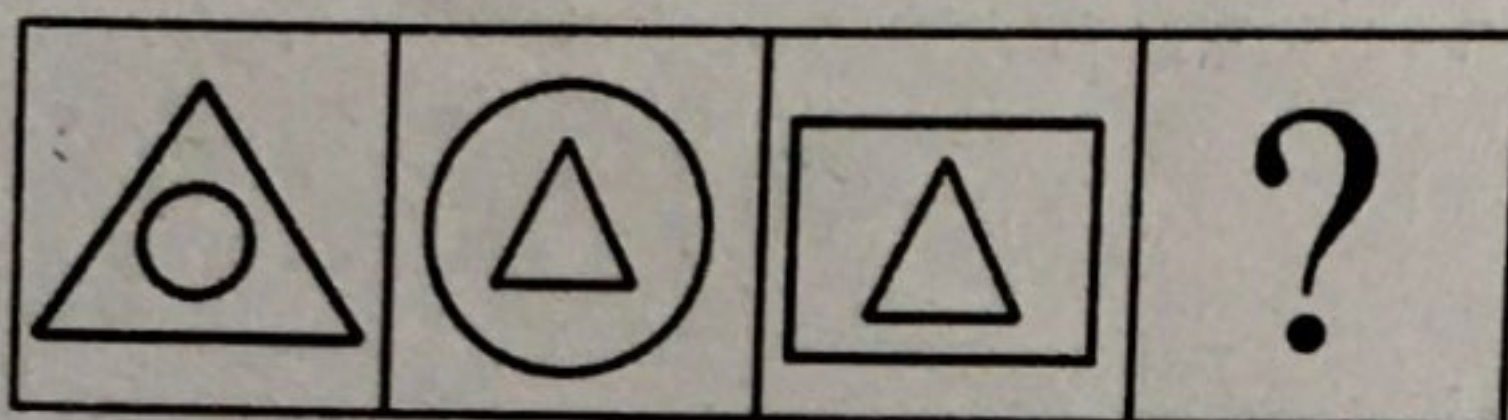




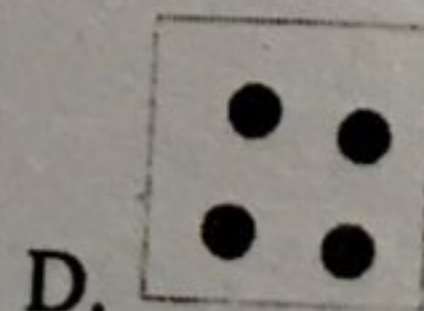
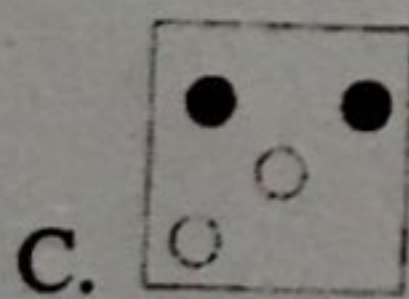
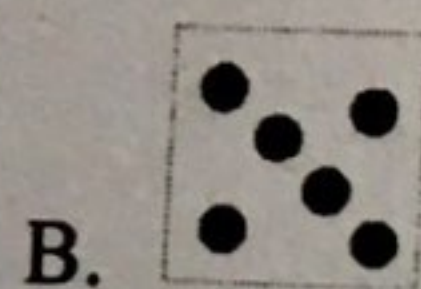
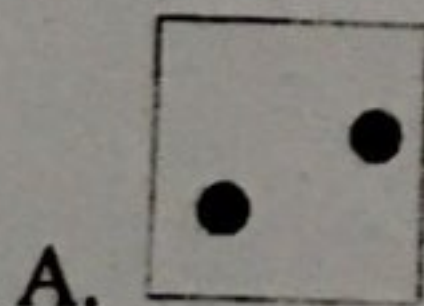
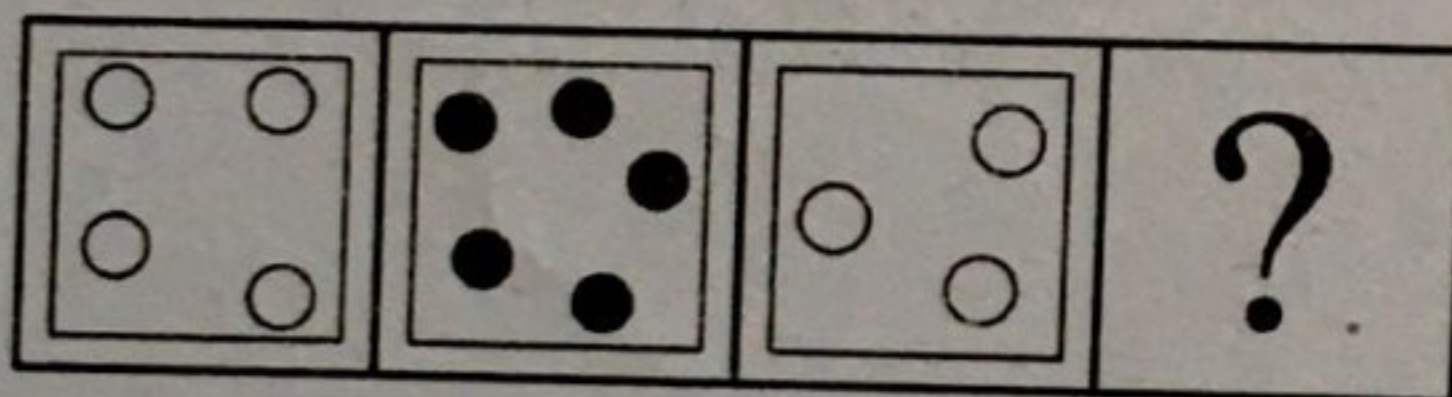
Q. 13



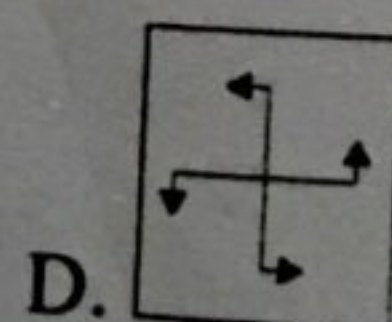
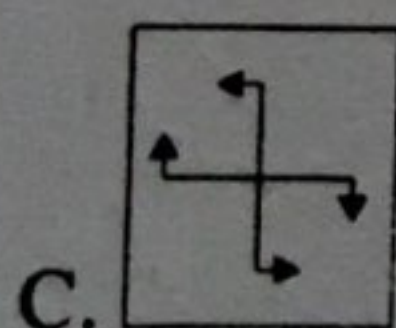
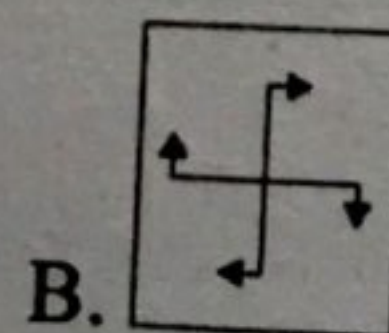
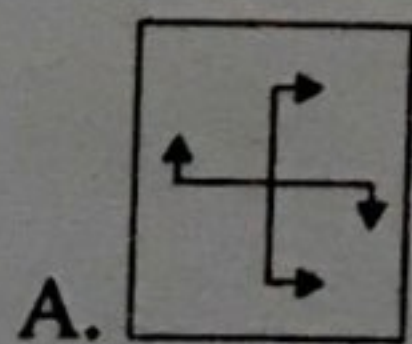
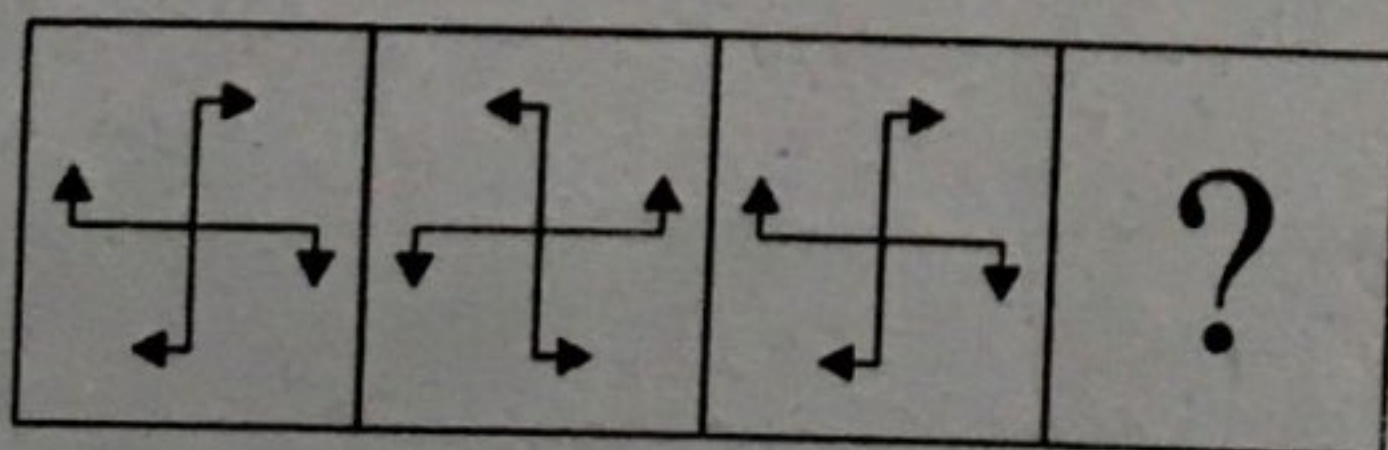
Q. 14



Q. 15

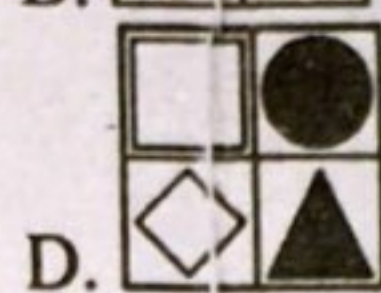
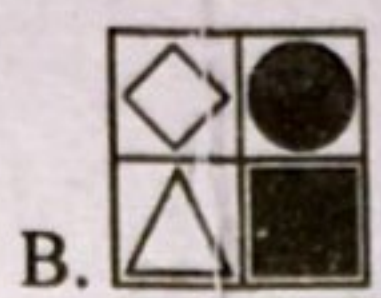
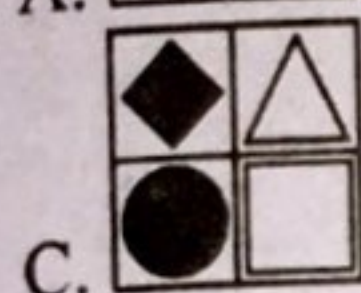
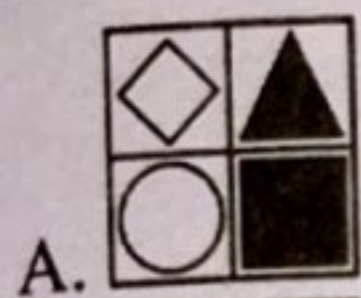
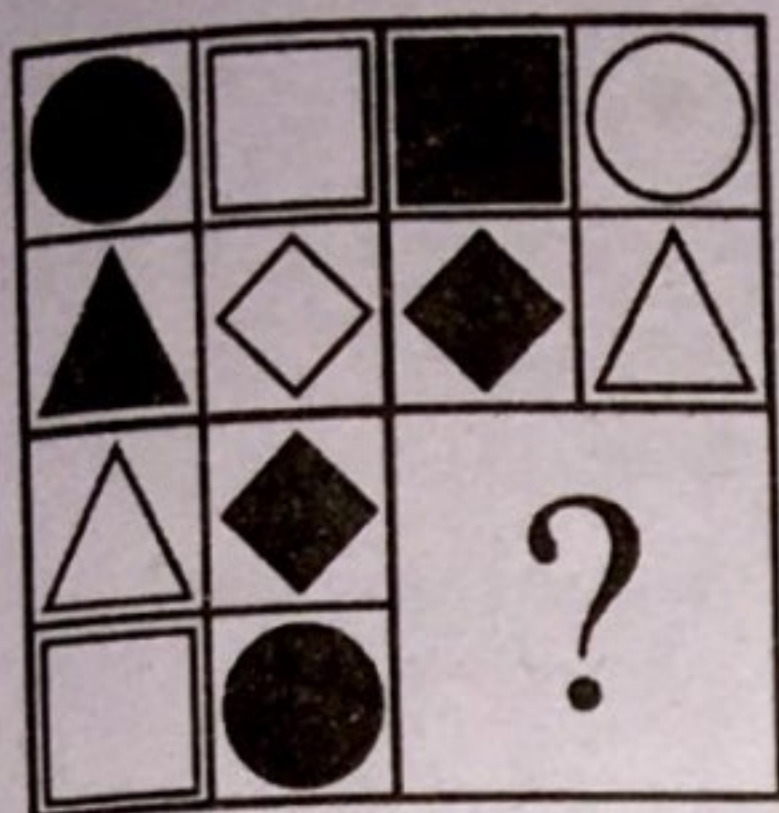


Q. 16

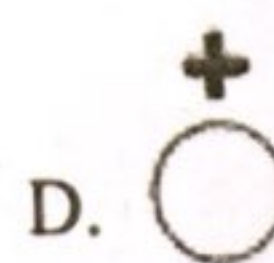
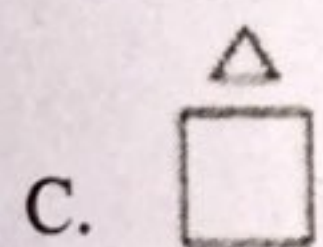
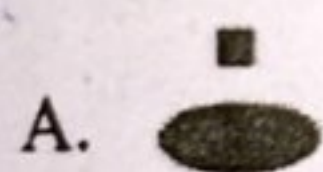
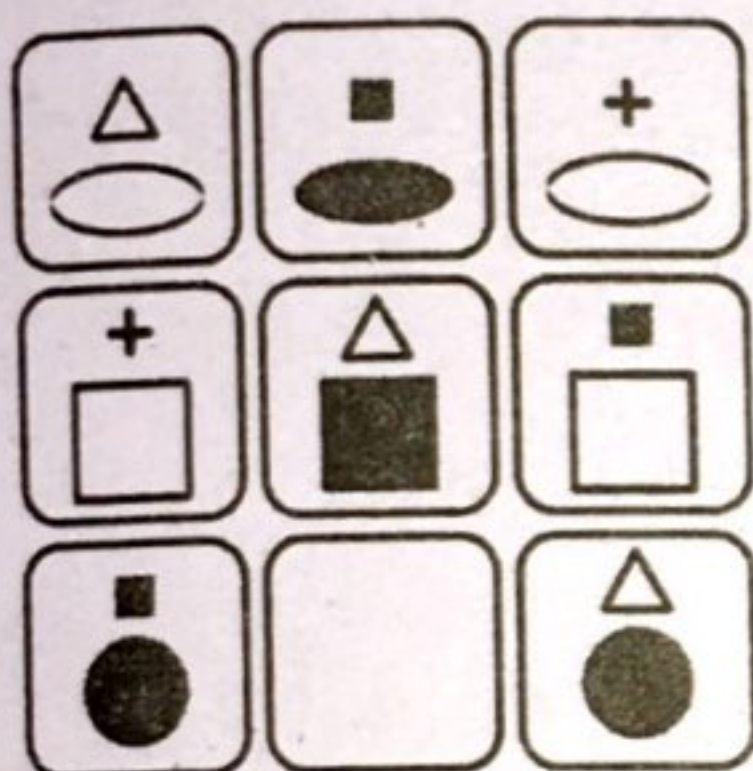




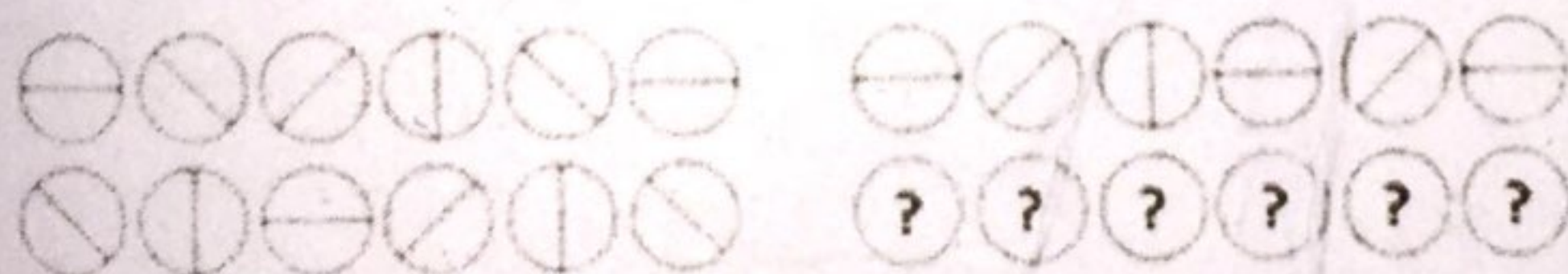
Q. 17 Insert the missing figure:



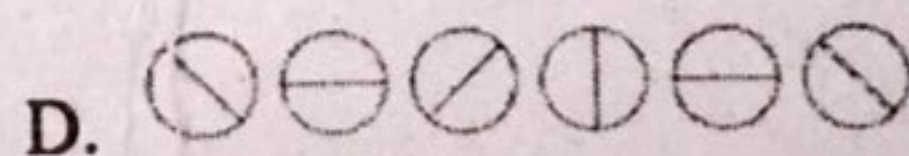
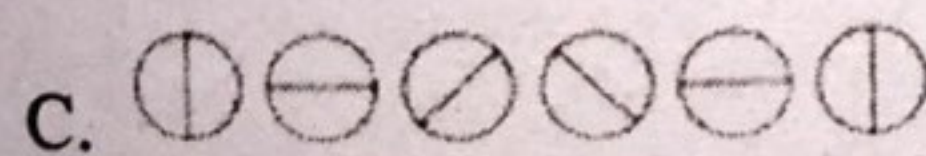
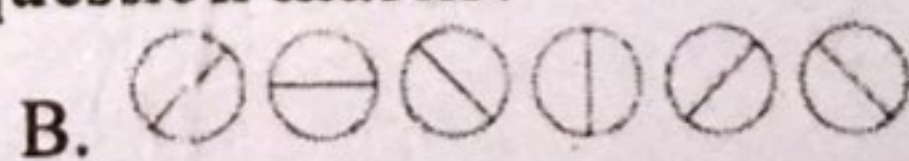
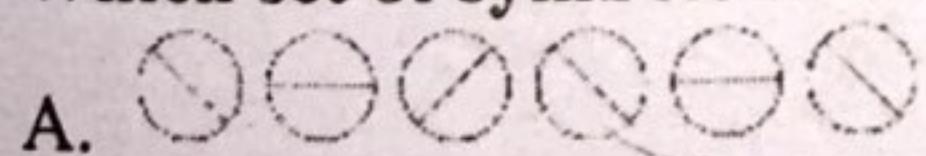
Q. 18



Q. 19

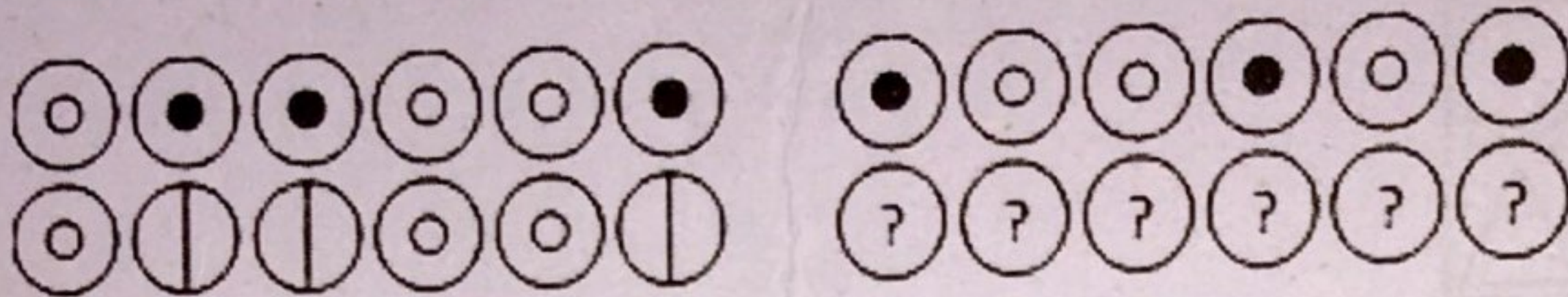


Which set of symbols should replace the question marks?

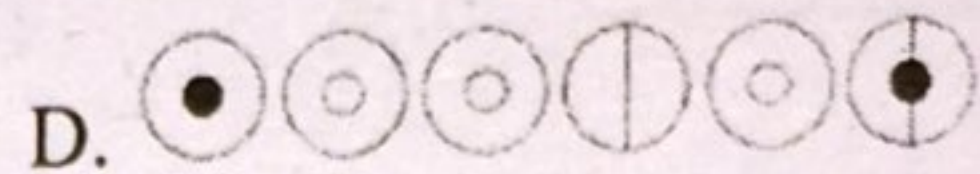
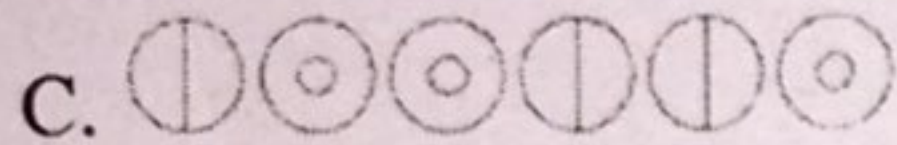
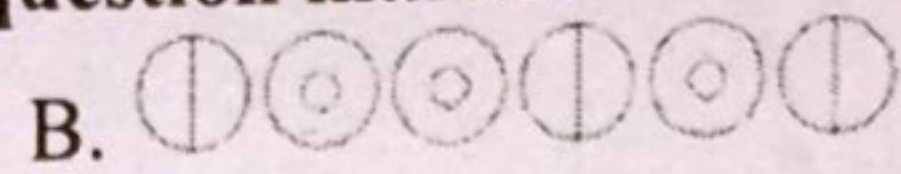
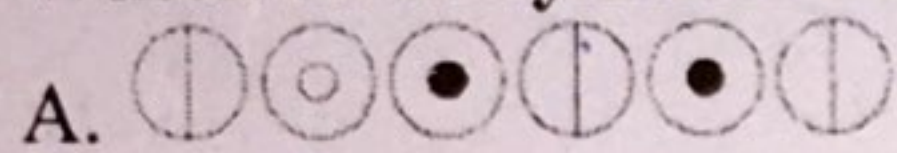




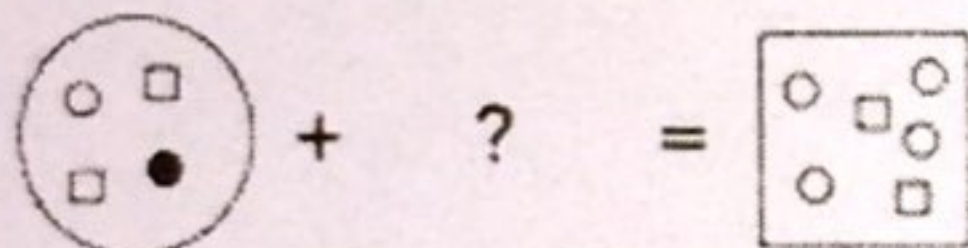
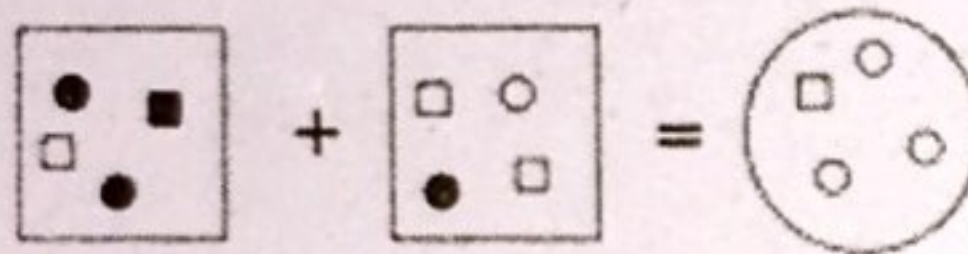
Q. 20



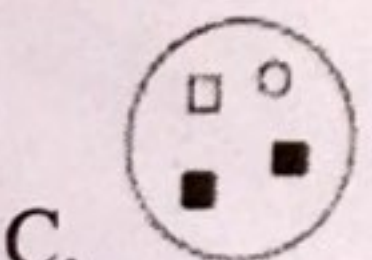
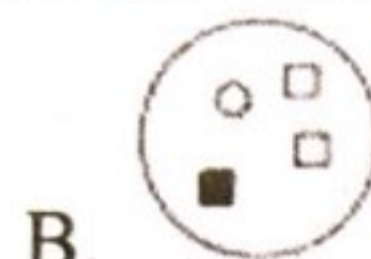
Which set of symbols should replace the question marks?



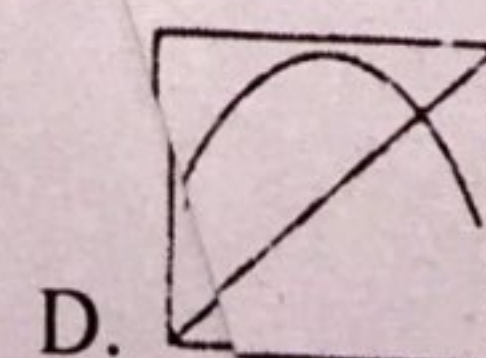
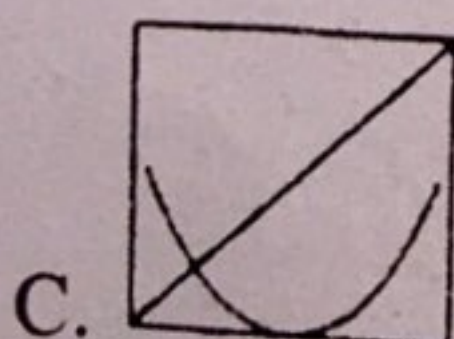
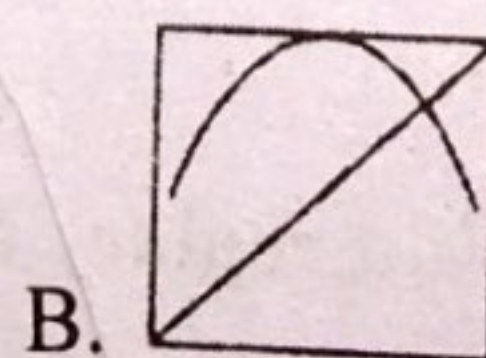
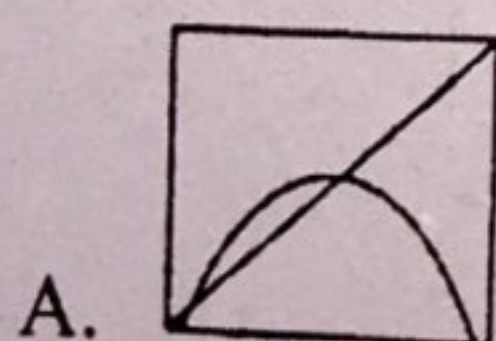
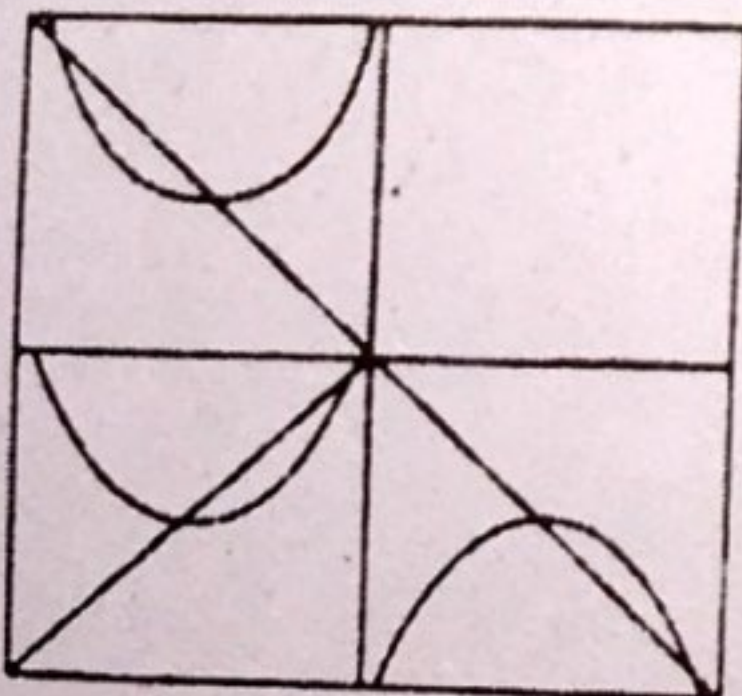
Q. 21



Which circle below should replace the question mark?



Q. 22 Insert the missing figure:





Q. 23

△ □ △ | □ ○ □ | ○ ◇ ○ | ◇ □ ?

- (1) ◇ (2) □ (3) ○ (4) △

- A. 1 B. 2  
C. 3 D. 4

┌ ┐ | □ ▢ | □ ▢ ?

- (1) □ ▢ (2) ┌ ┐ (3) ┌ ┐ (4) ┌ ┐

Q. 24

- A. 1 B. 2  
C. 3 D. 4

┌ ┐ | ┌ ┐ | ┌ ┐ | ?

- (1) ┌ ┐ (2) ┌ ┐ (3) ┌ ┐ (4) ┌ ┐

Q. 25

- A. 1 B. 2  
C. 3 D. 4

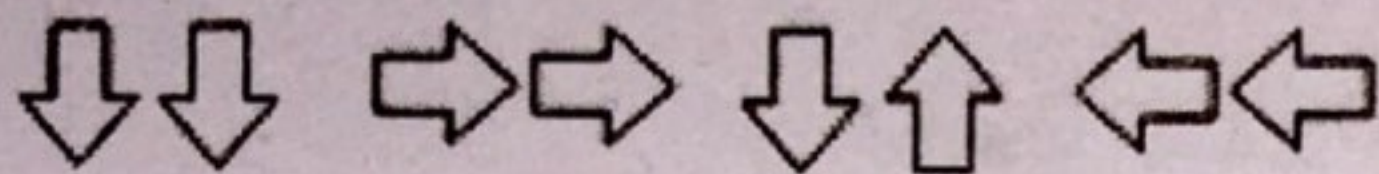
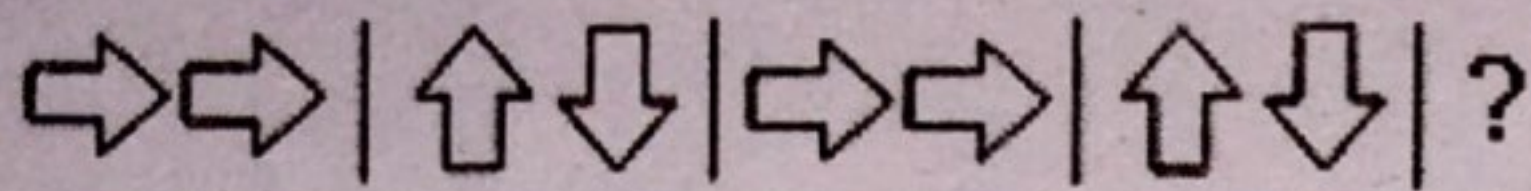
□ ○ | □ △ | □ □ | □ □ | □ □ | □ □ ?

- (1) □ ○ (2) □ △ (3) □ □ (4) □ □

Q. 26

- A. 1 B. 2  
C. 3 D. 4





(1) (2) (3) (4)

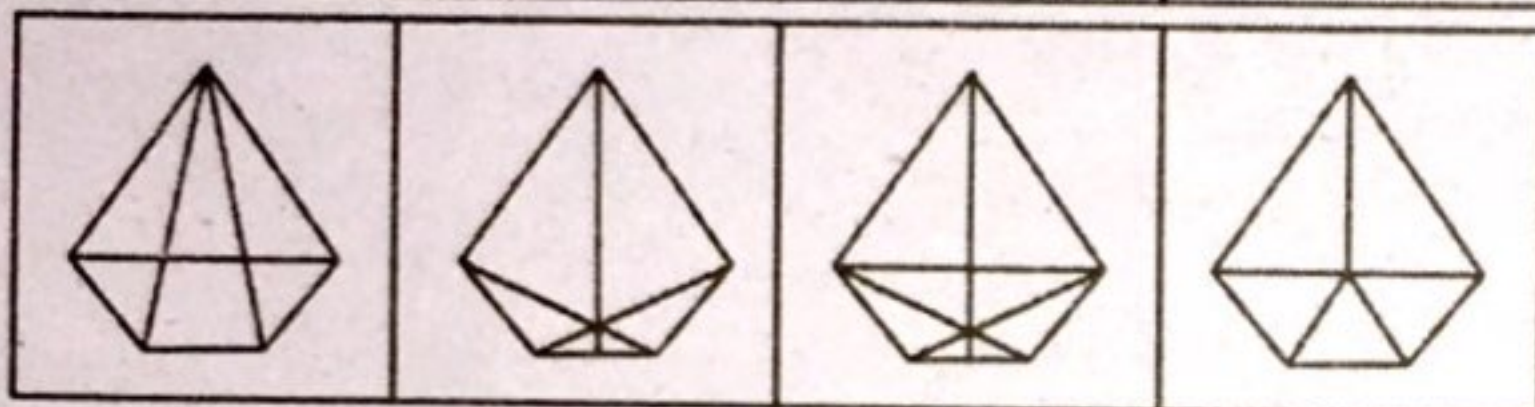
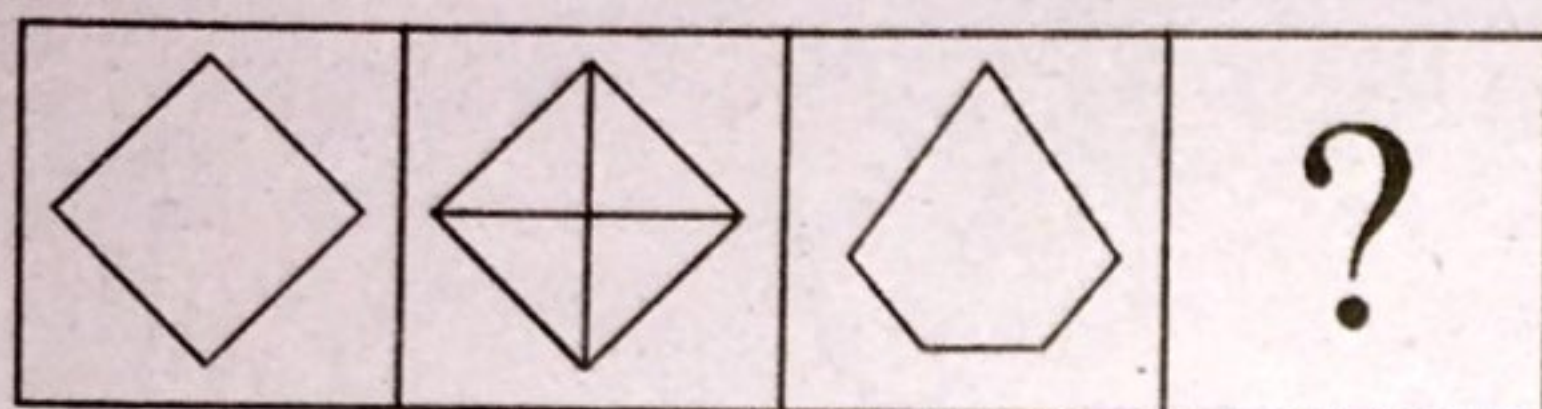
Q. 27

A. 1

B. 2

C. 3

D. 4



(1) (2) (3) (4)

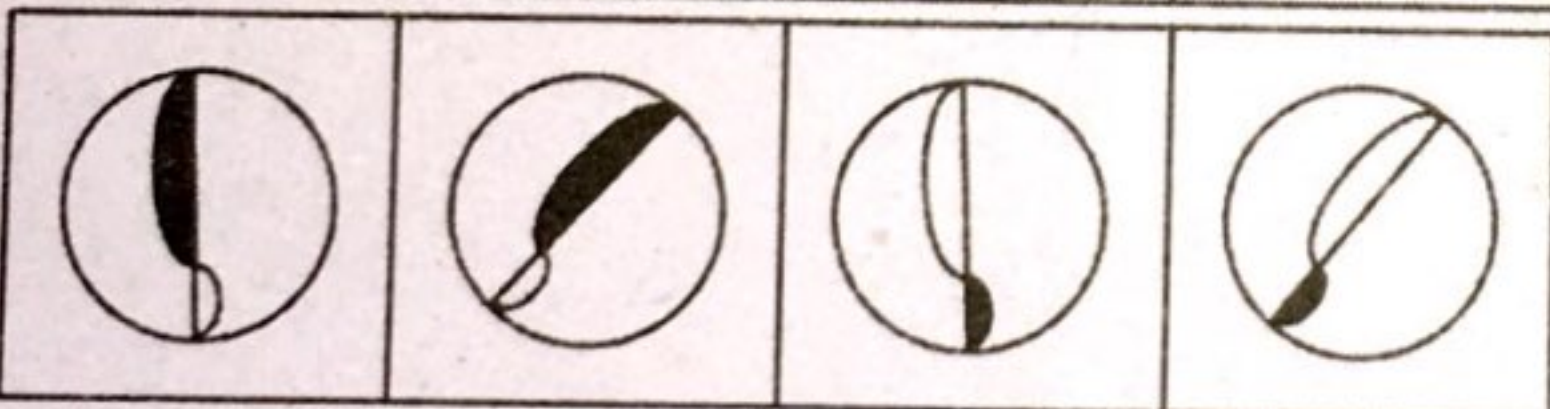
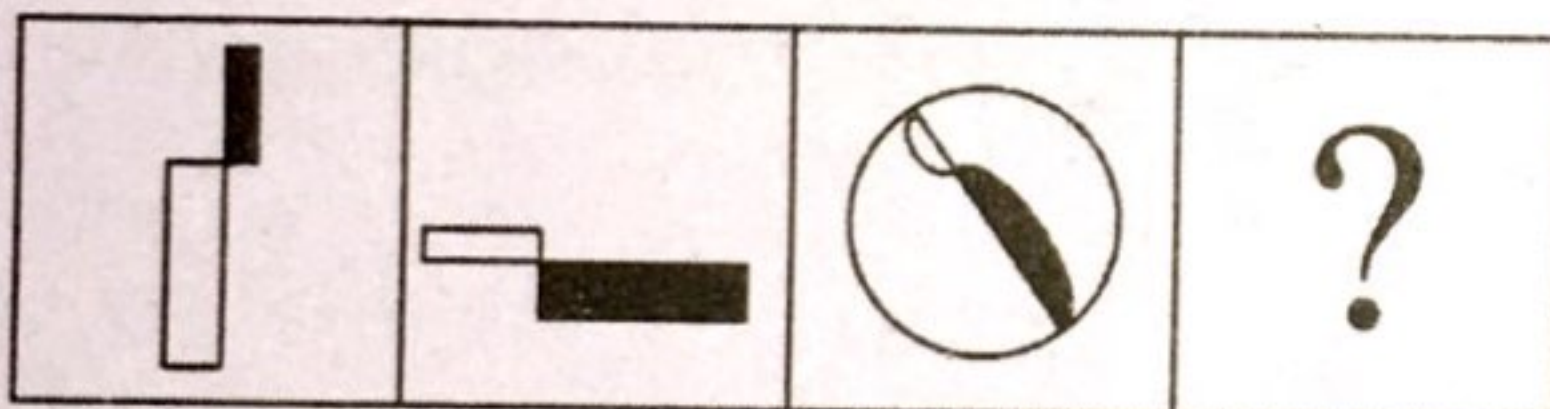
Q. 28

A. 1

B. 2

C. 3

D. 4



(1) (2) (3) (4)

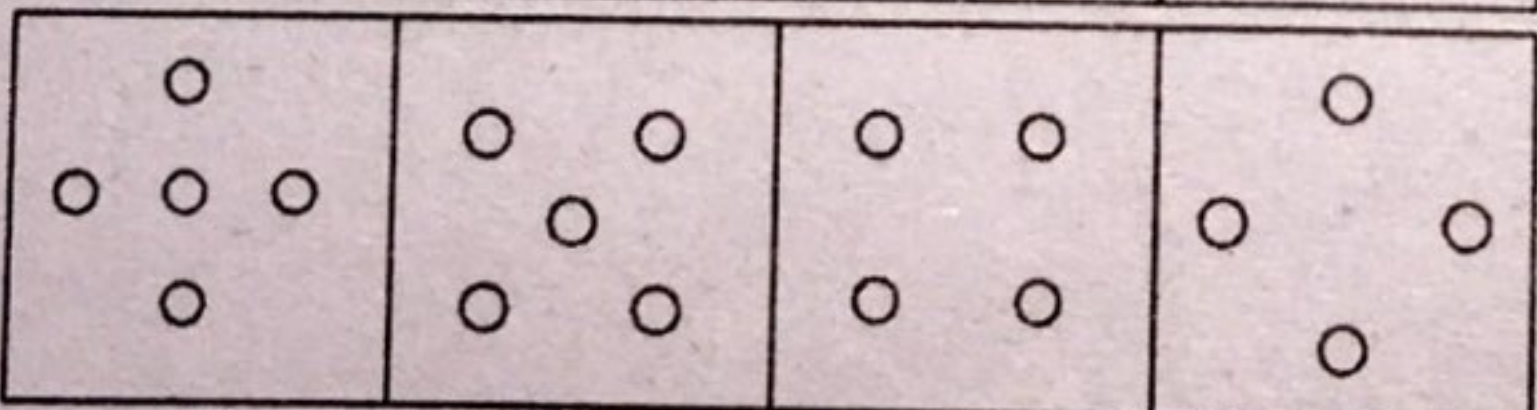
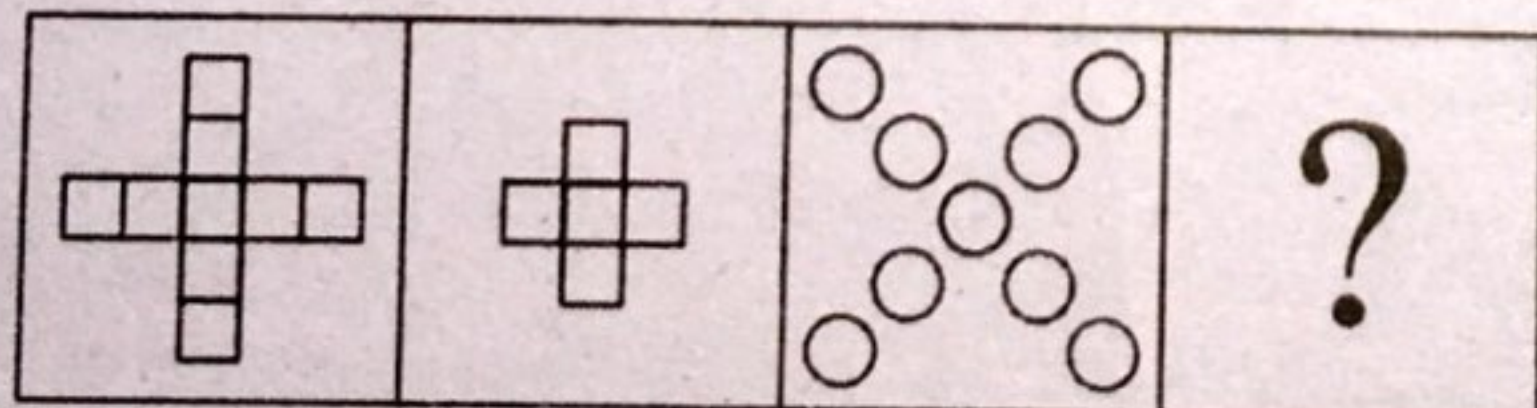
Q. 29

A. 1

B. 2

C. 3

D. 4



(1) (2) (3) (4)

Q. 30

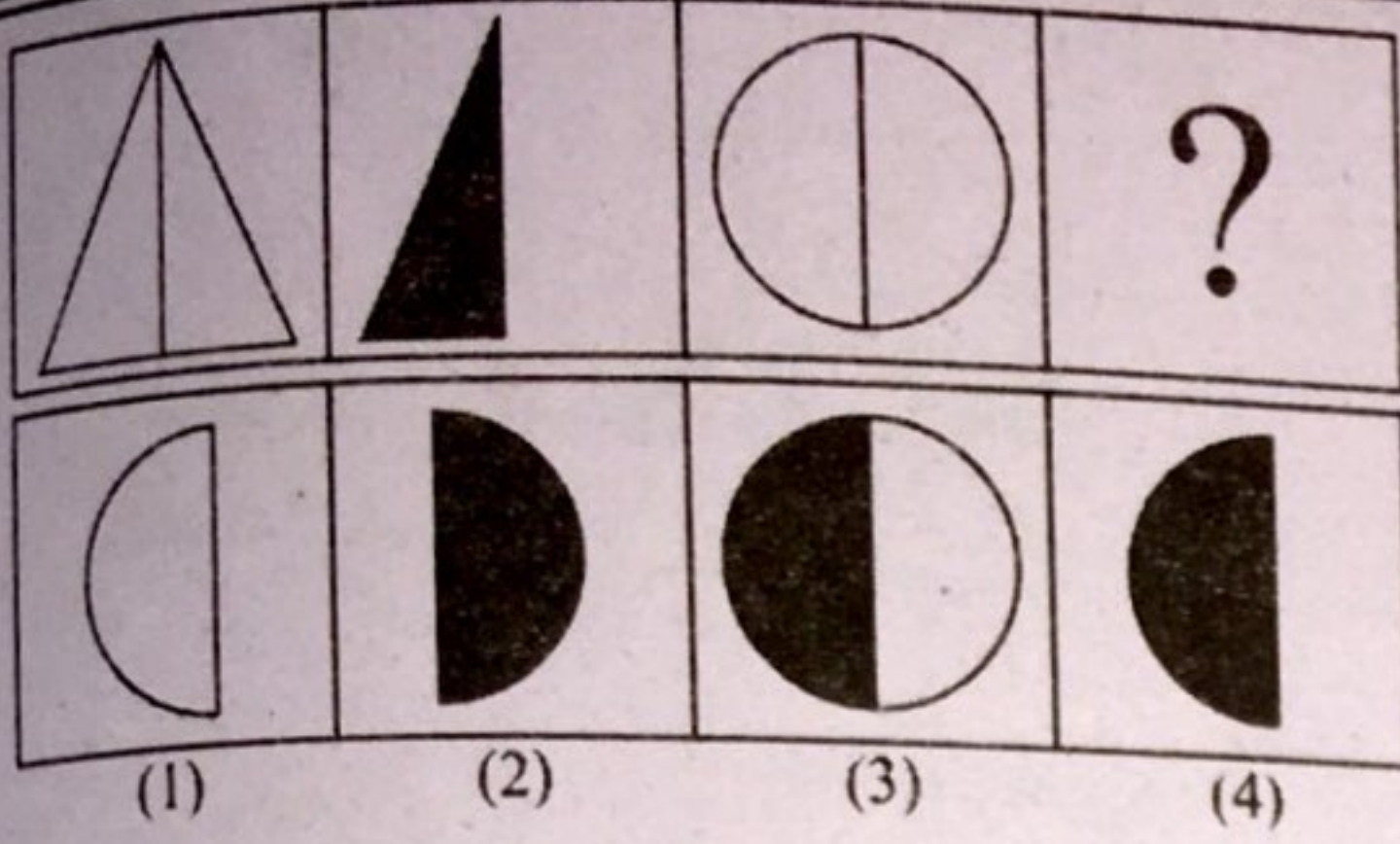
A. 1

B. 2

C. 3

D. 4





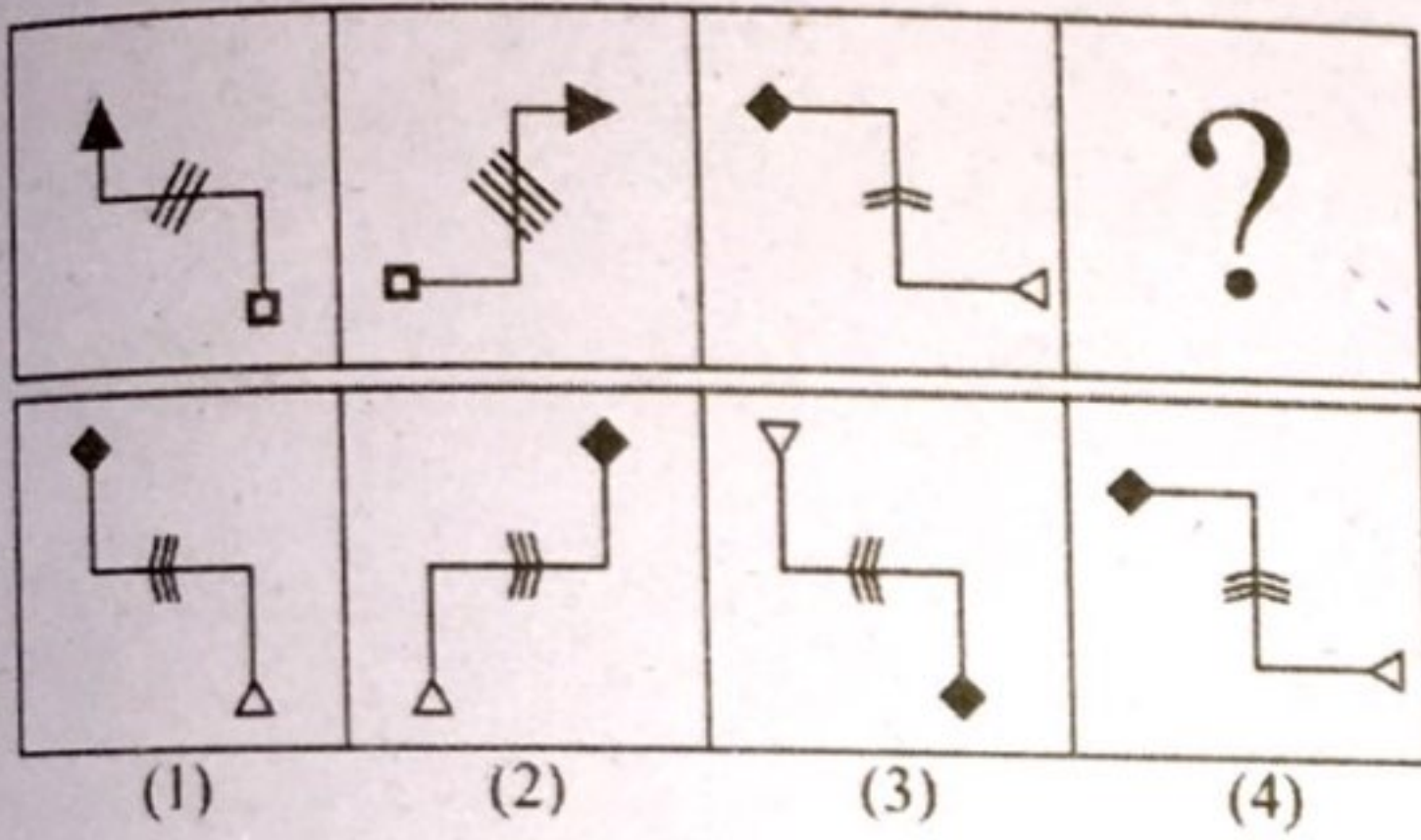
Q.31

A. 1

B. 2

C. 3

D. 4



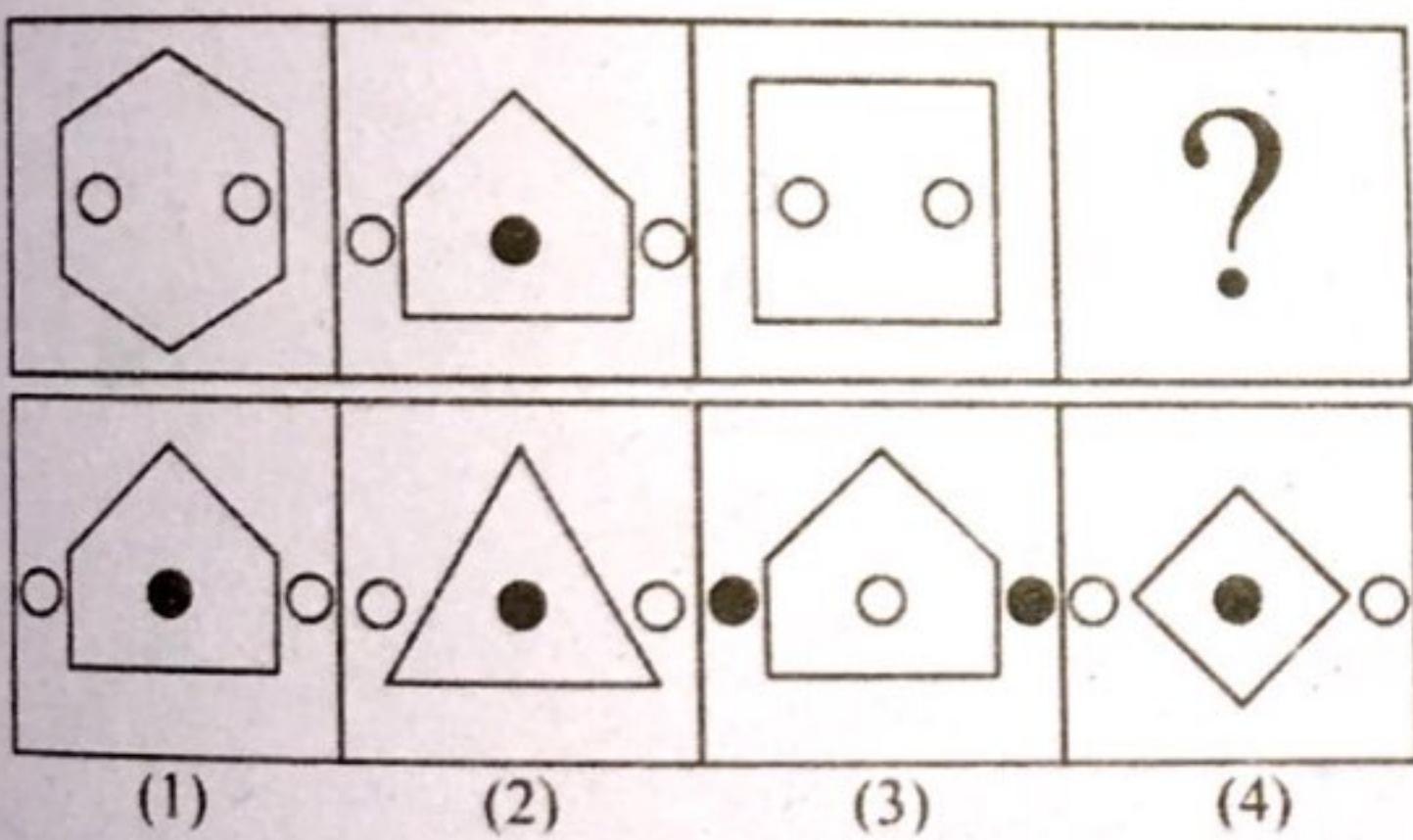
Q.32

A. 1

B. 2

C. 3

D. 4



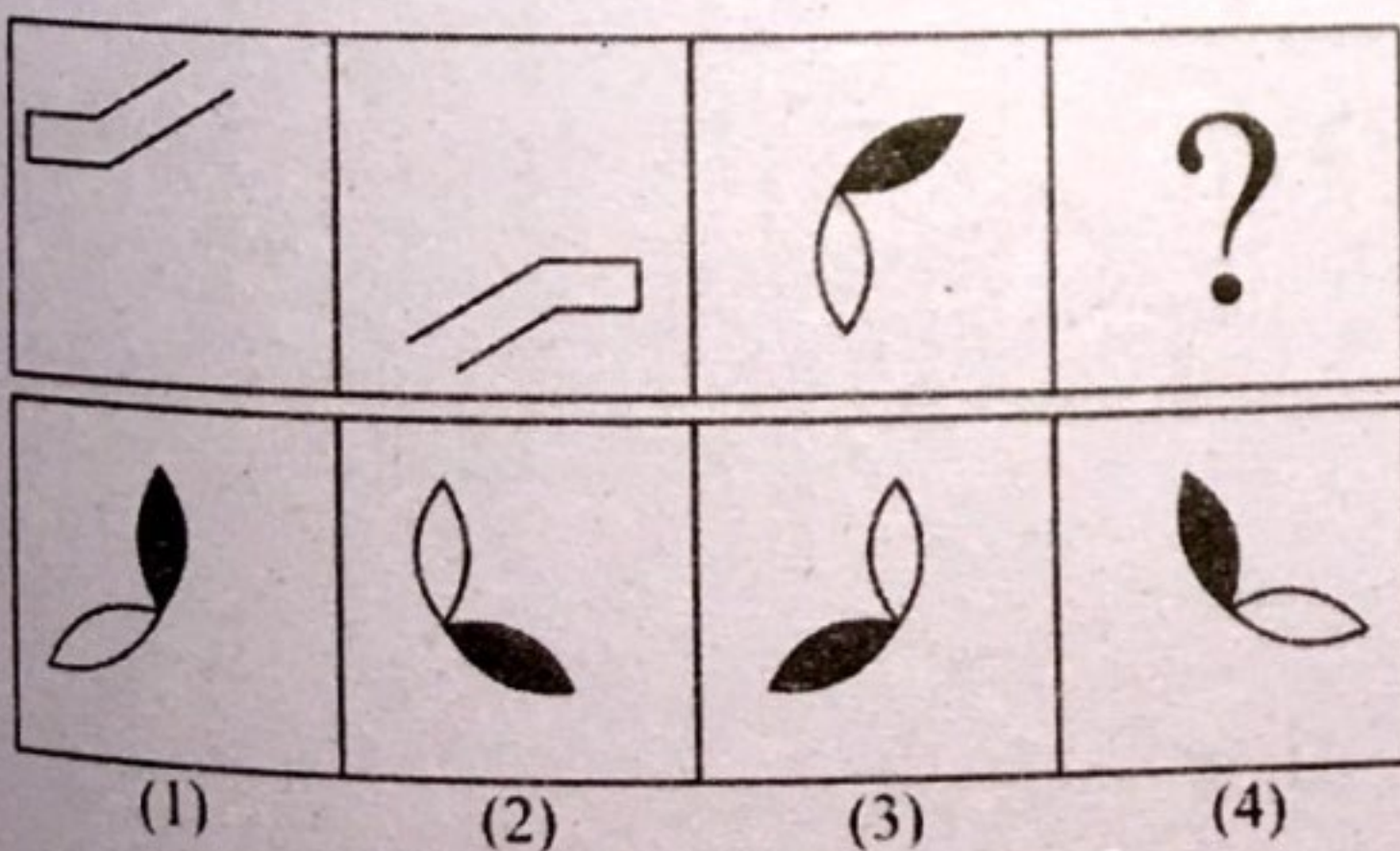
Q.33

A. 1

B. 2

C. 3

D. 4



Q.34

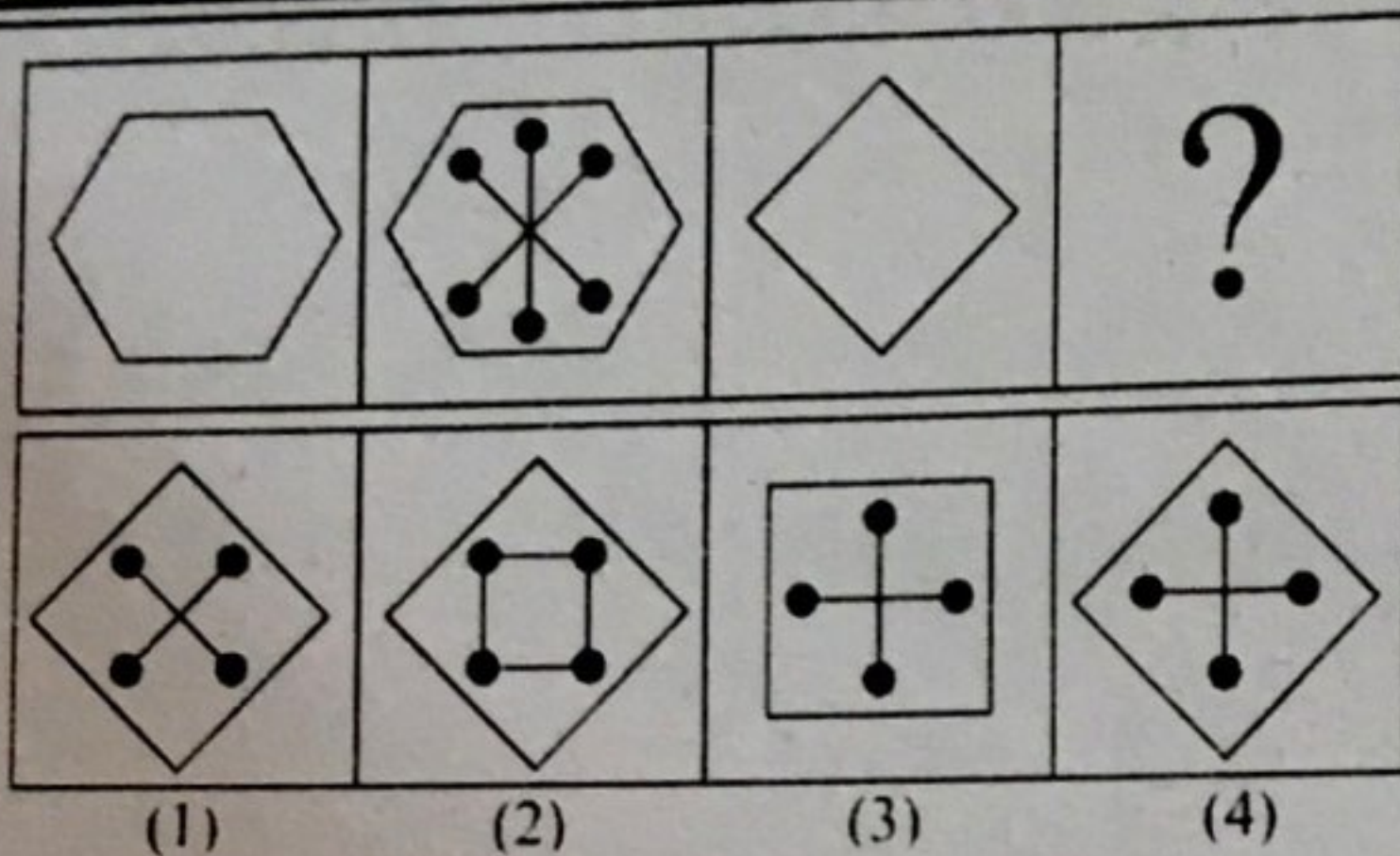
A. 1

B. 2

C. 3

D. 4





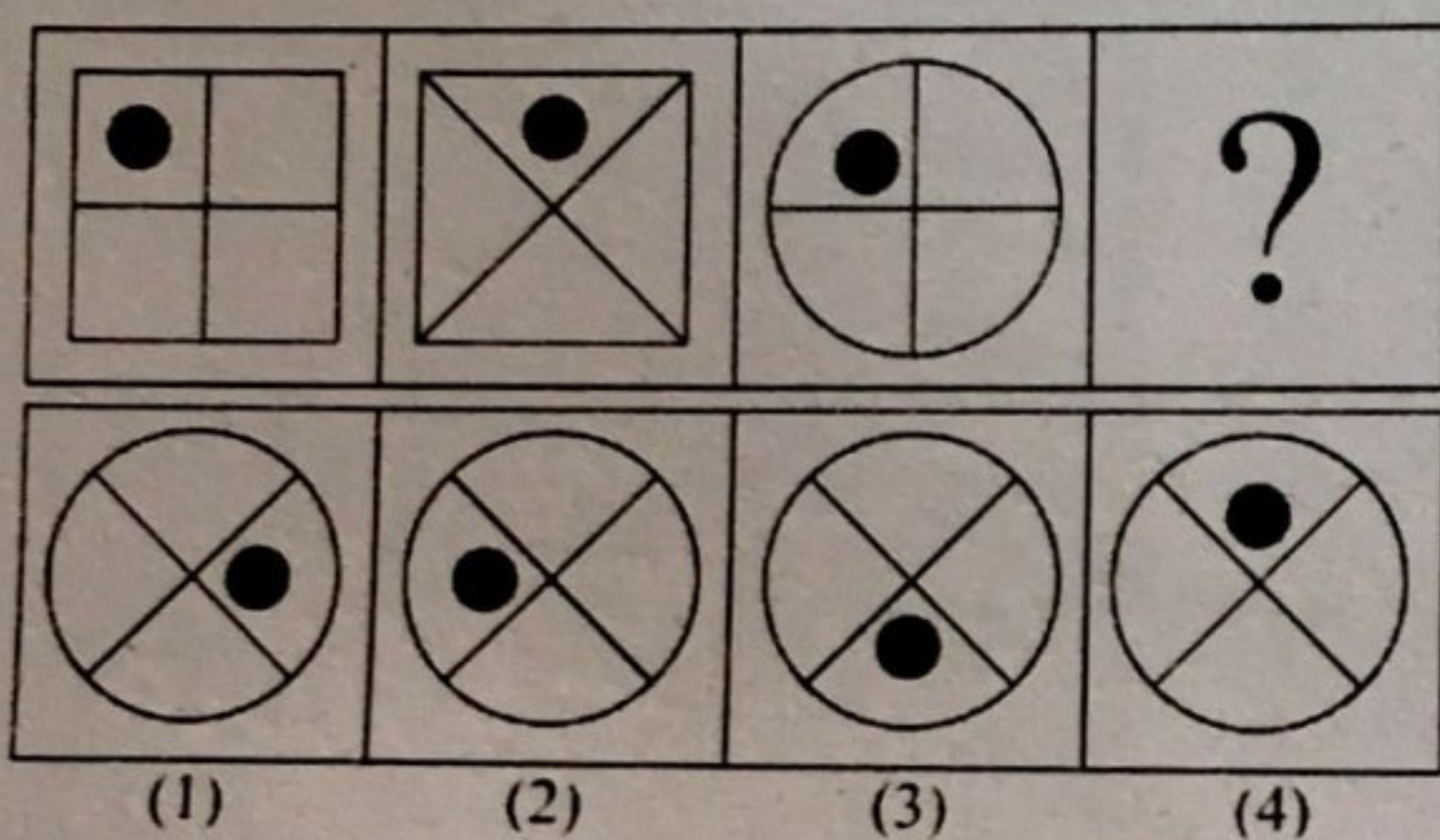
Q. 35

A. 1

B. 2

C. 3

D. 4



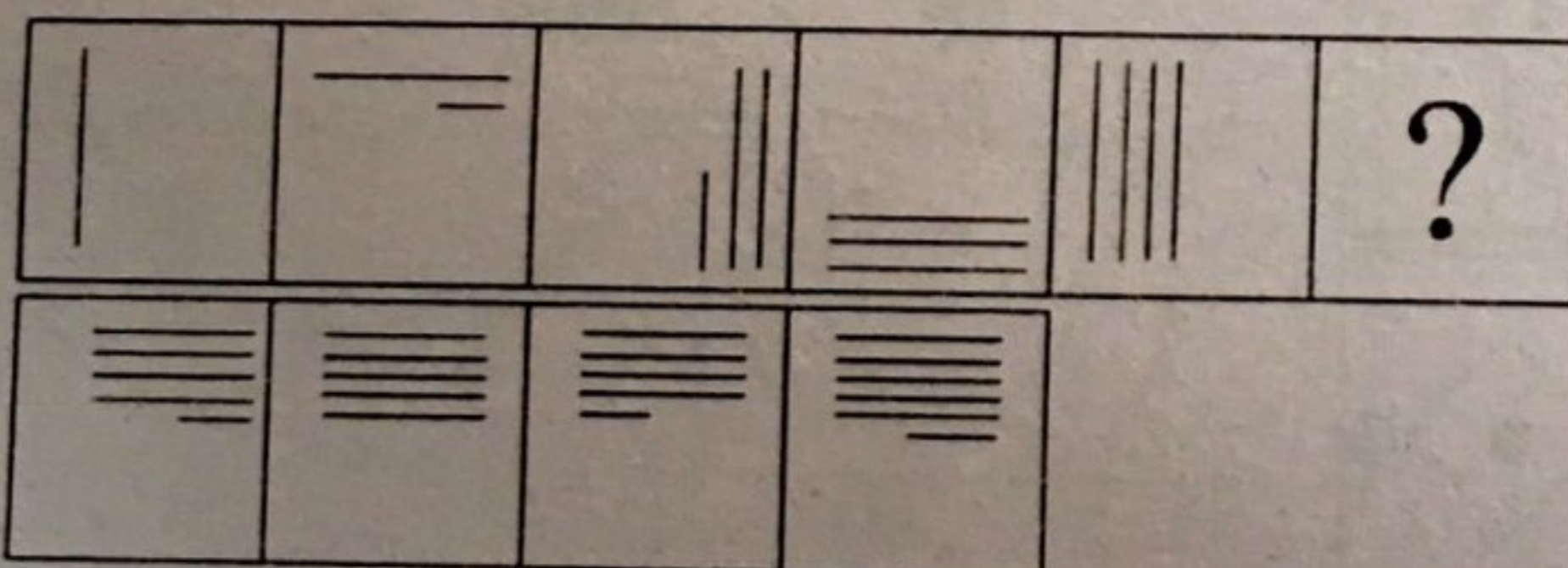
Q. 36

A. 1

B. 2

C. 3

D. 4



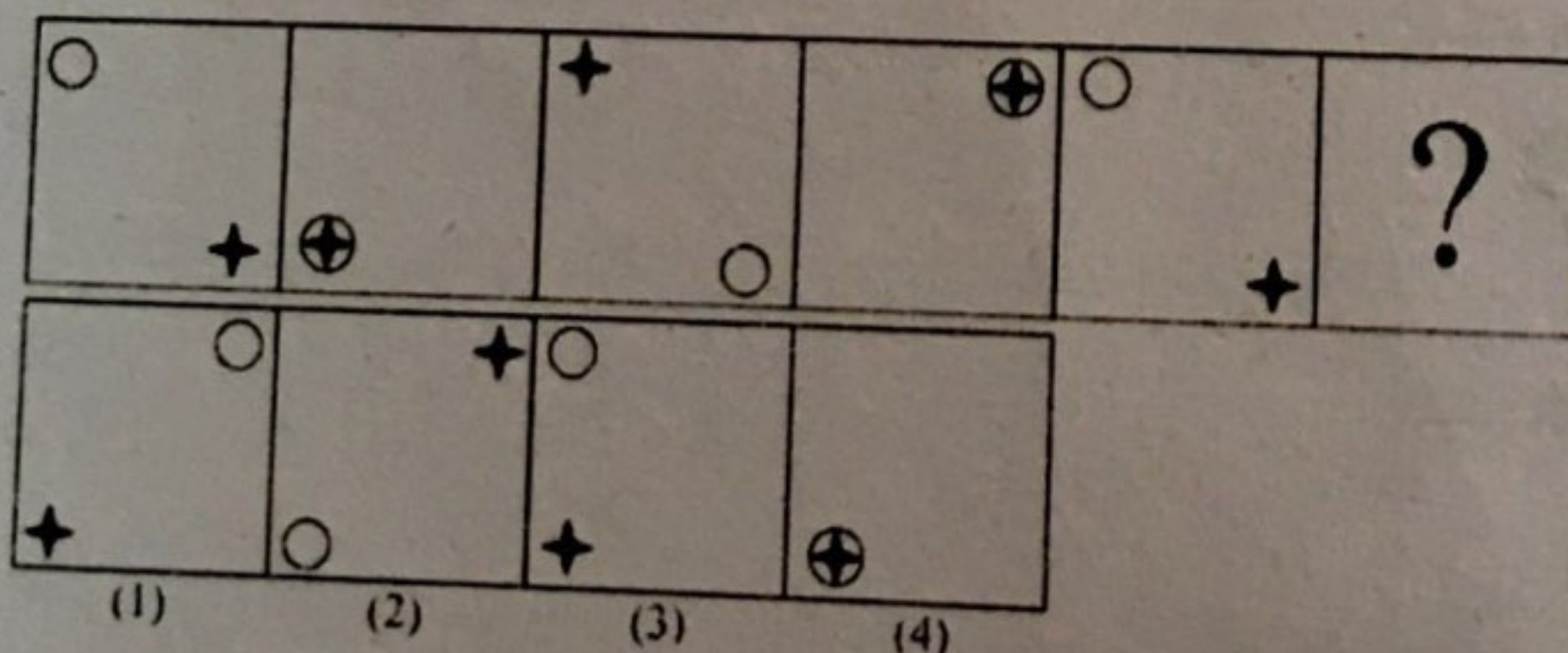
Q. 37

A. 1

B. 2

C. 3

D. 4



Q. 38

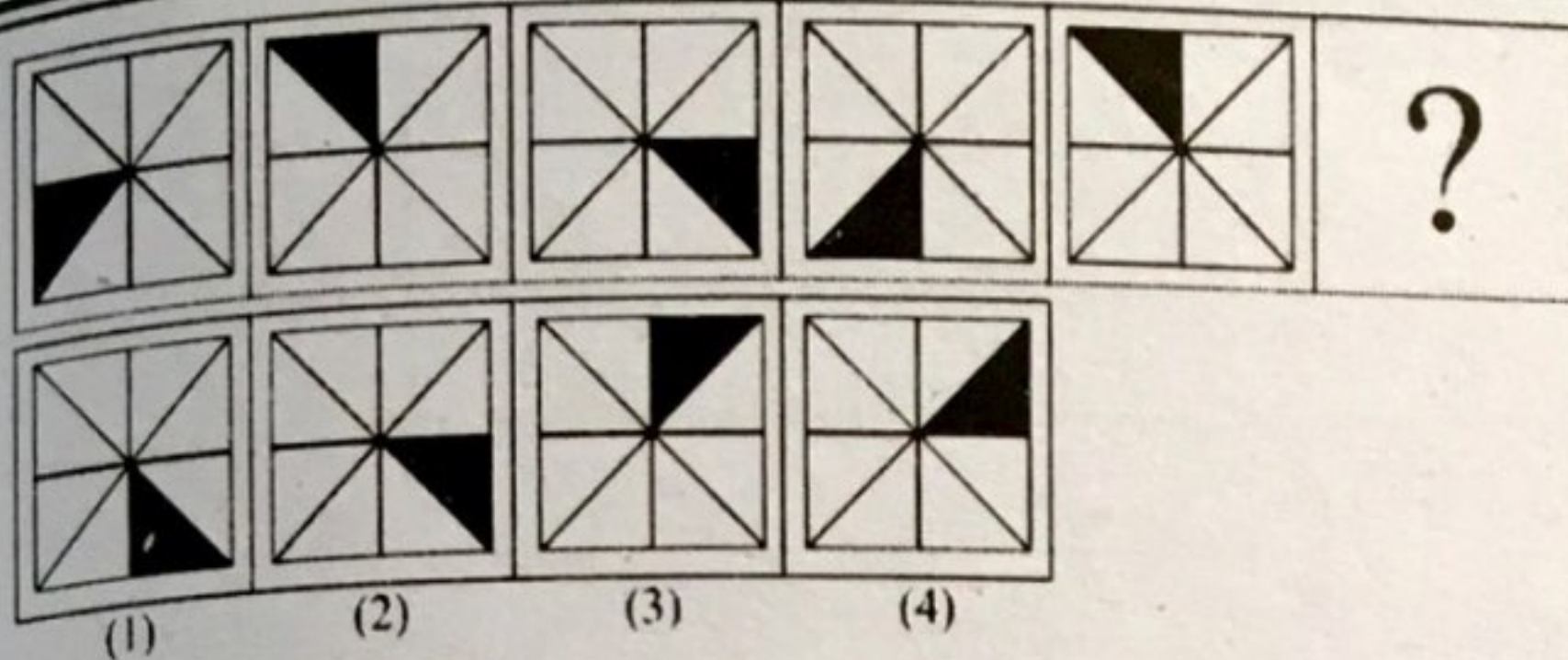
A. 1

B. 2

C. 3

D. 4





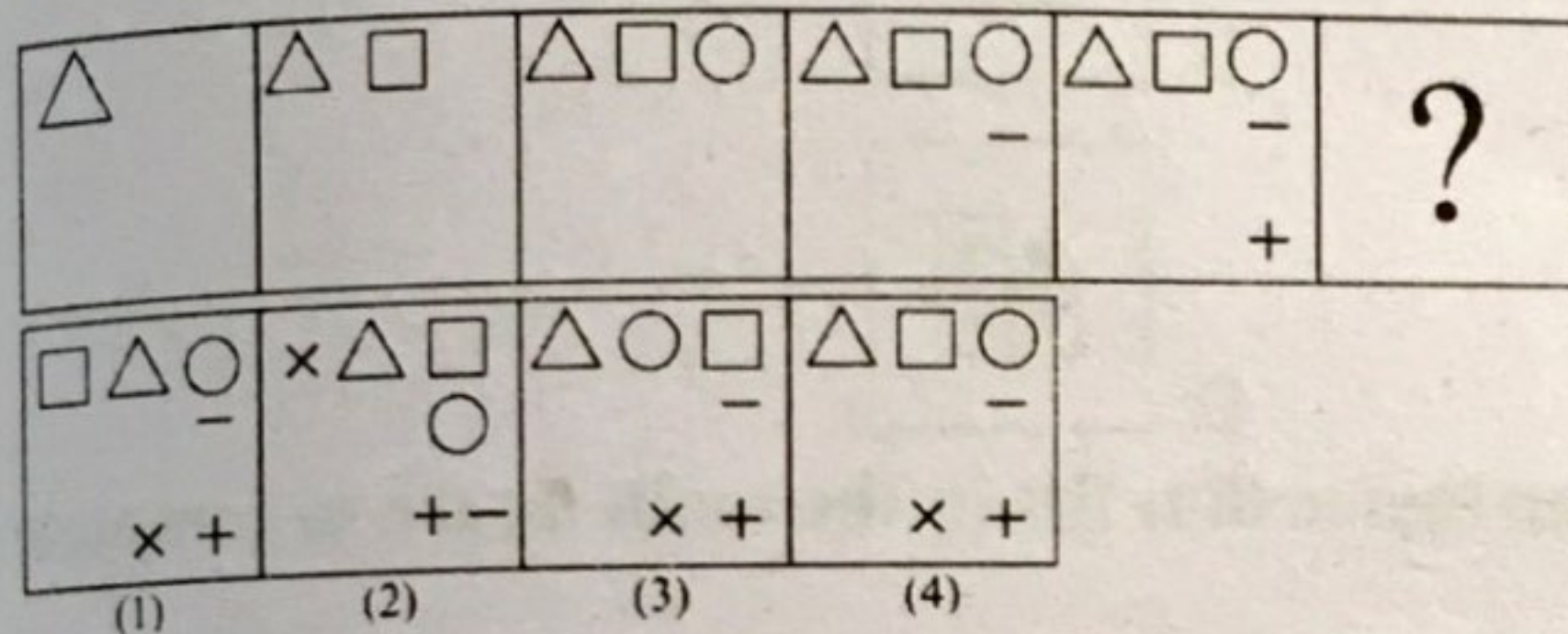
Q. 39

A. 1

B. 2

C. 3

D. 4



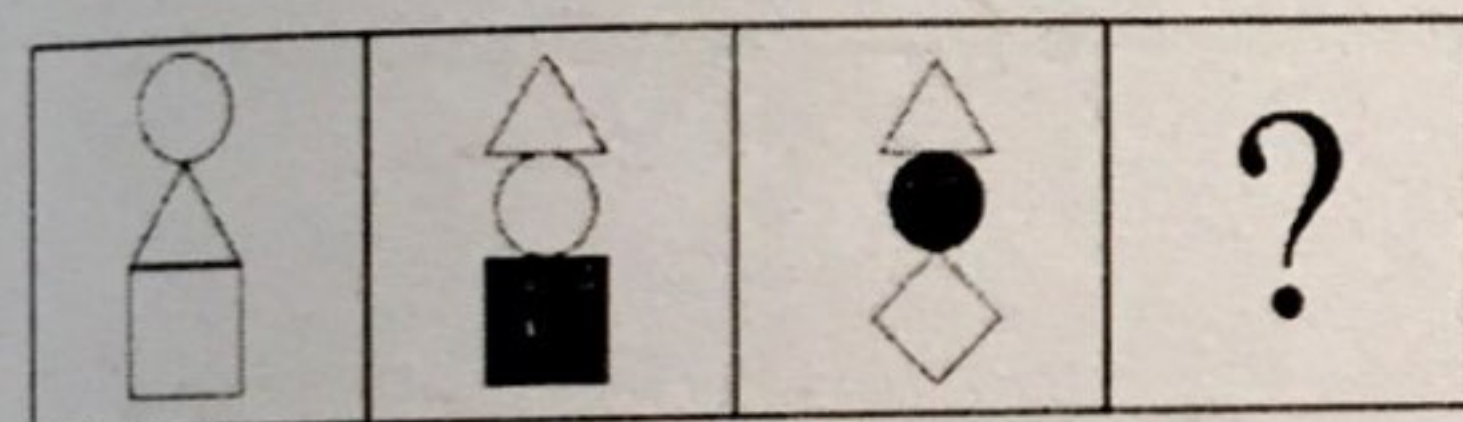
Q. 40

A. 1

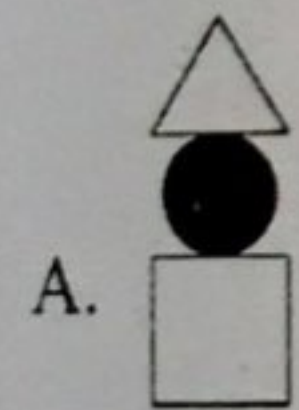
B. 2

C. 3

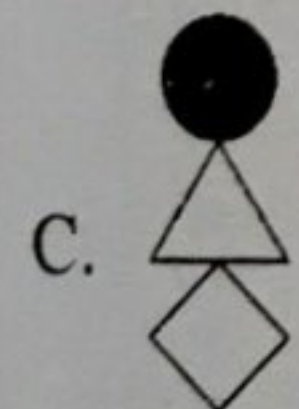
D. 4



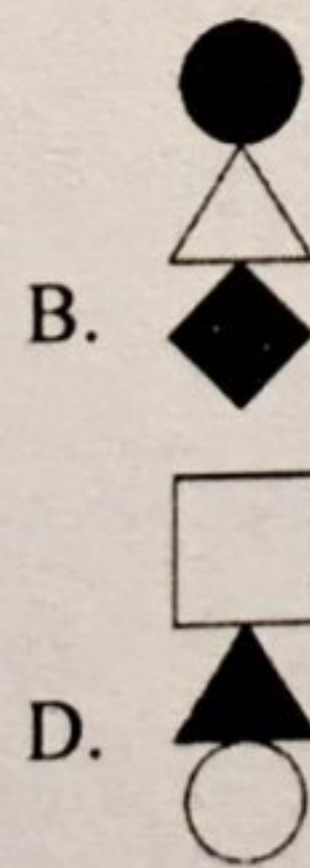
Q. 41



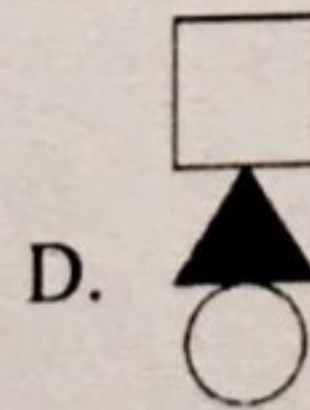
A.



C.

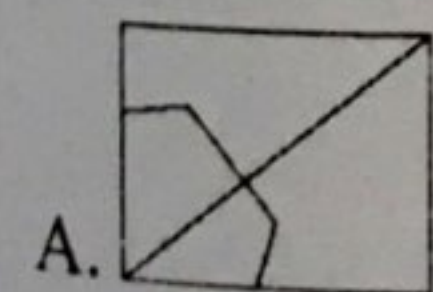
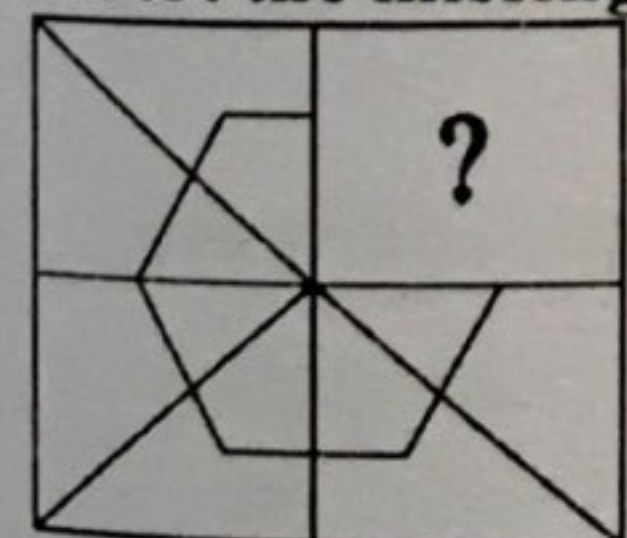


B.

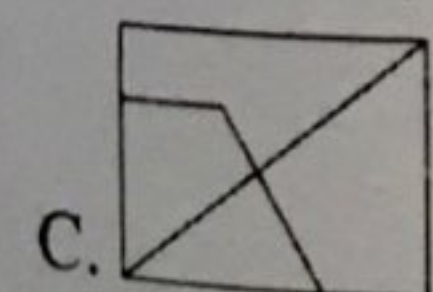


D.

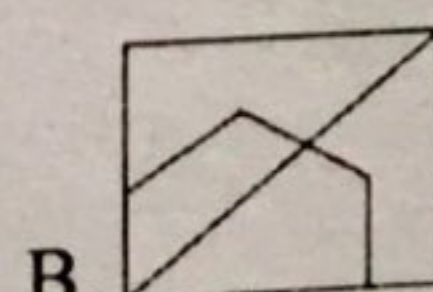
Q. 42 Insert the missing figure:



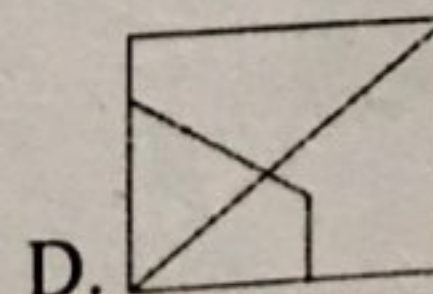
A.



C.



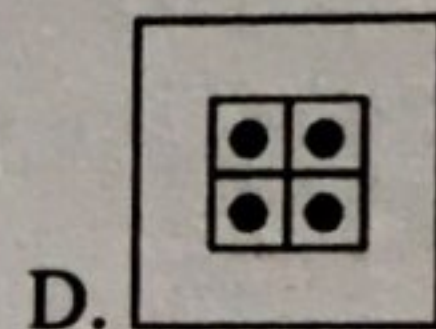
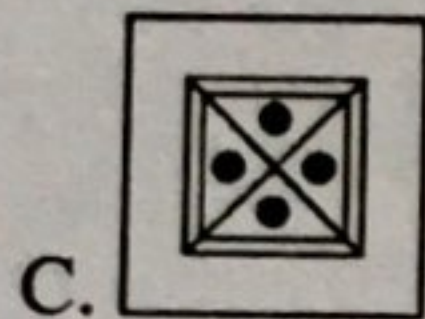
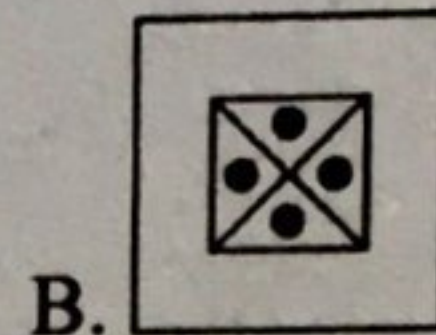
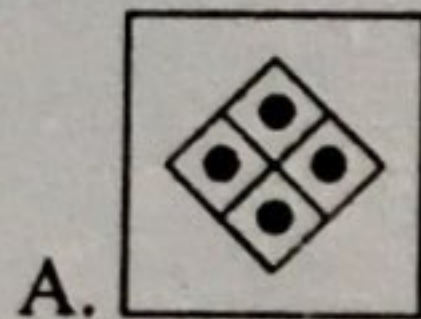
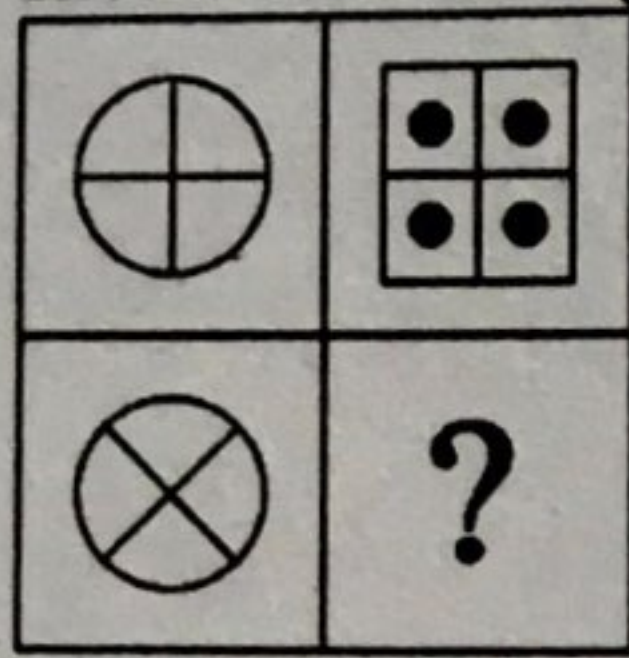
B.



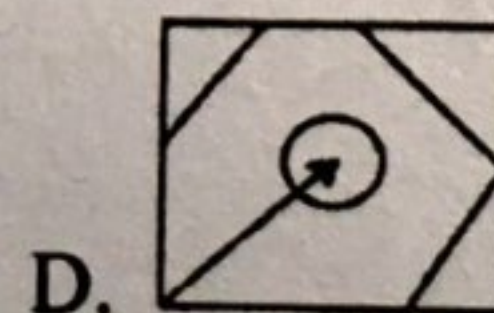
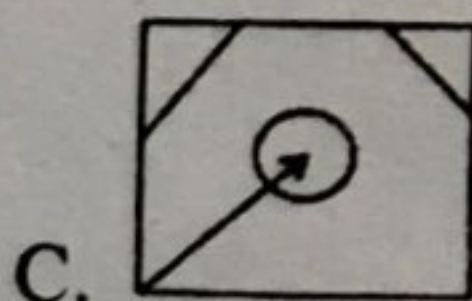
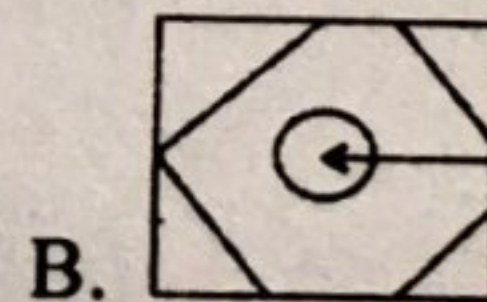
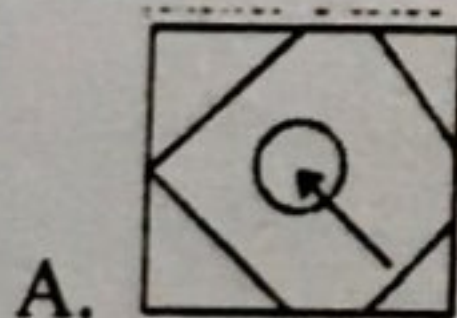
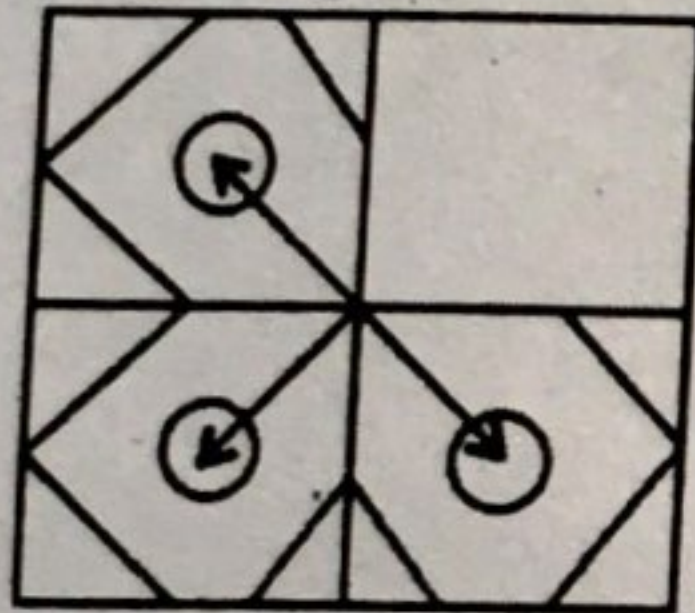
D.



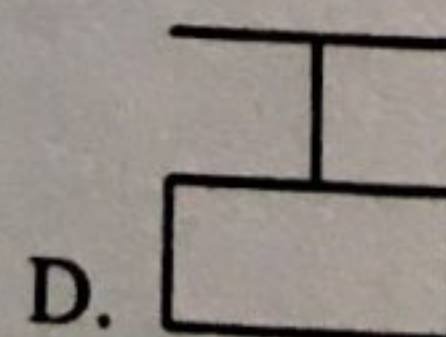
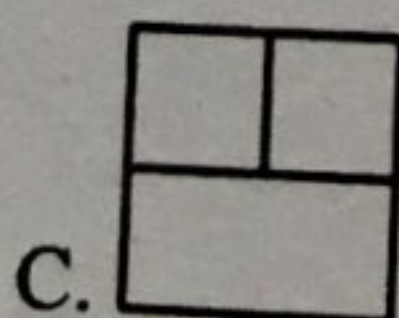
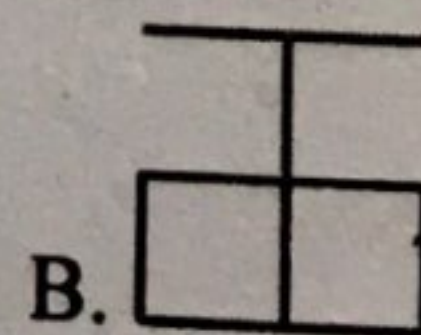
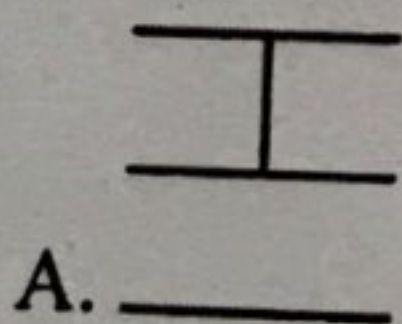
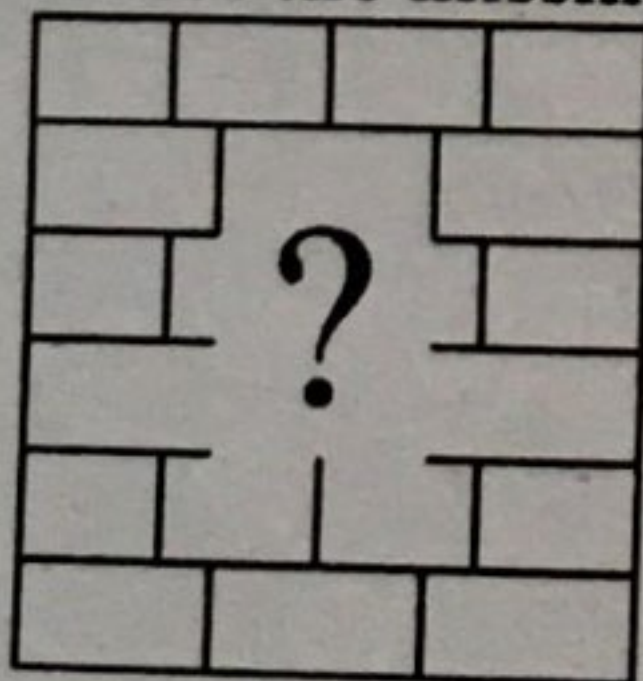
Q. 43 Insert the missing figure:



Q. 44 Select from the answer choices the figure that fits in the main figure to complete the original pattern

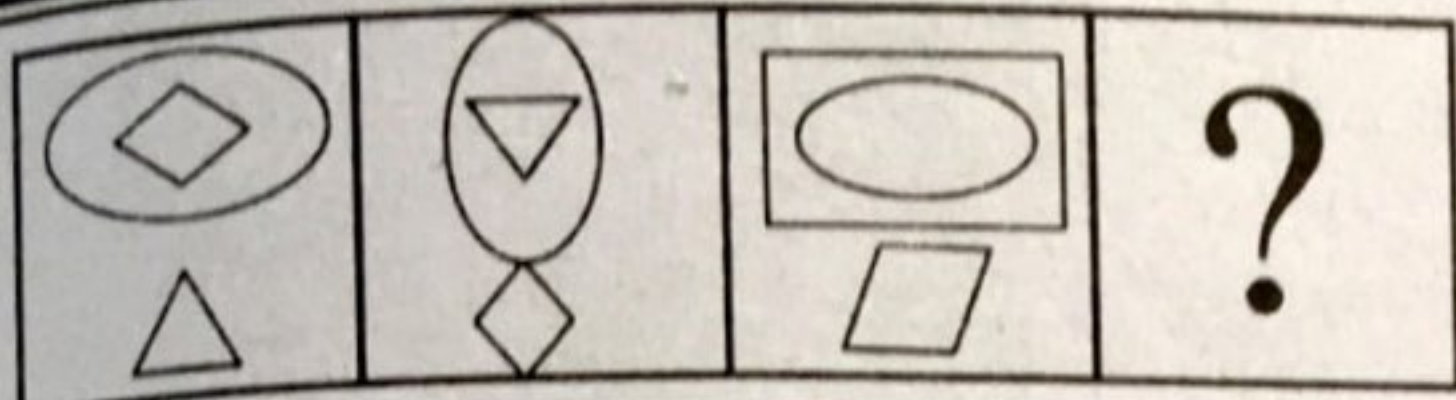


Q. 45 Insert the missing figure:

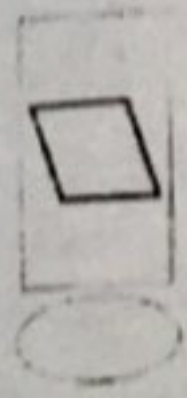




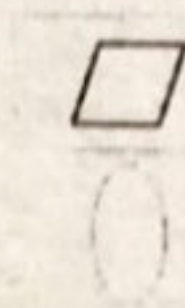
Q. 46



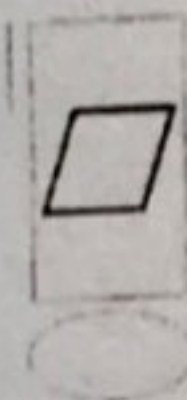
A.



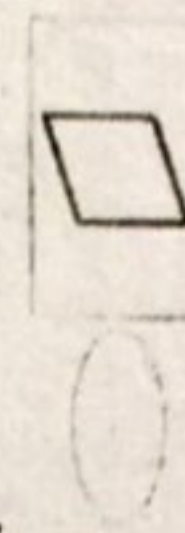
B.



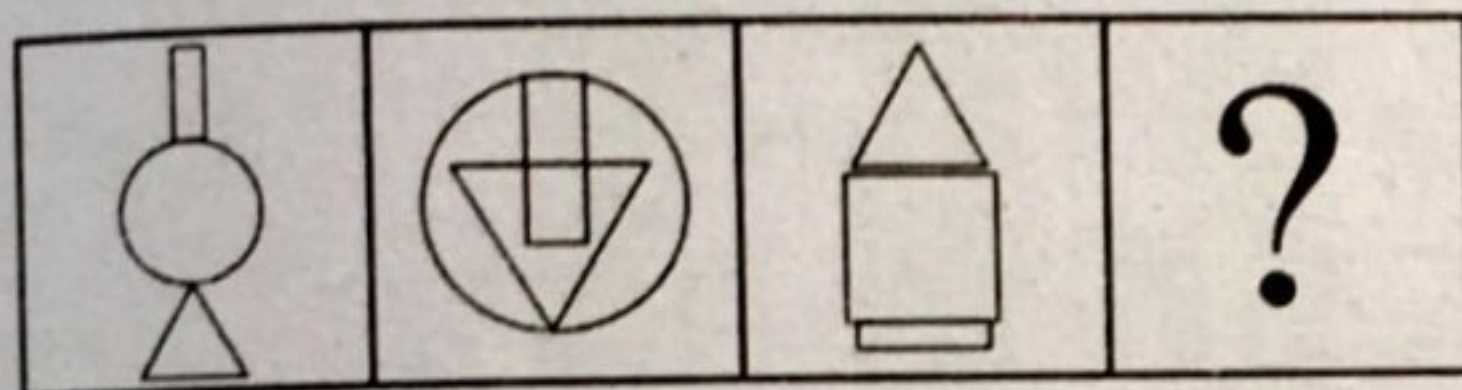
C.



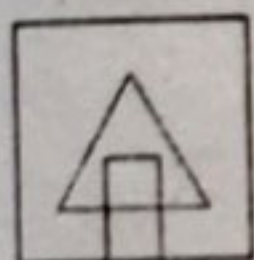
D.



Q. 47



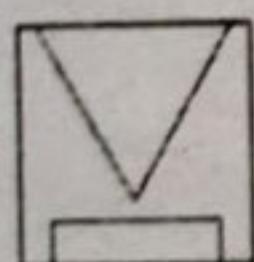
A.



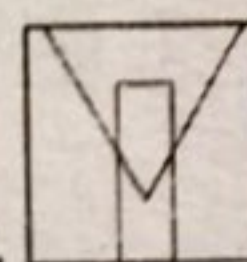
B.



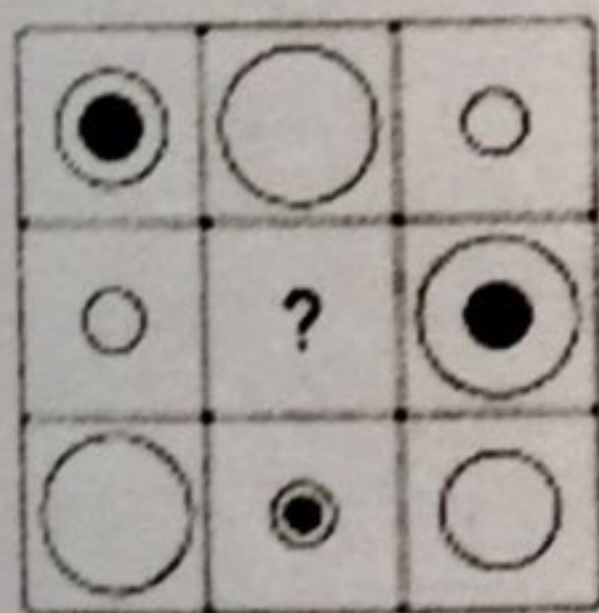
C.



D.



Q. 48



Draw the contents of the middle tile in accordance with the rules of logic already established.

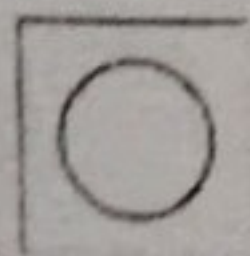
A.



B.



C.

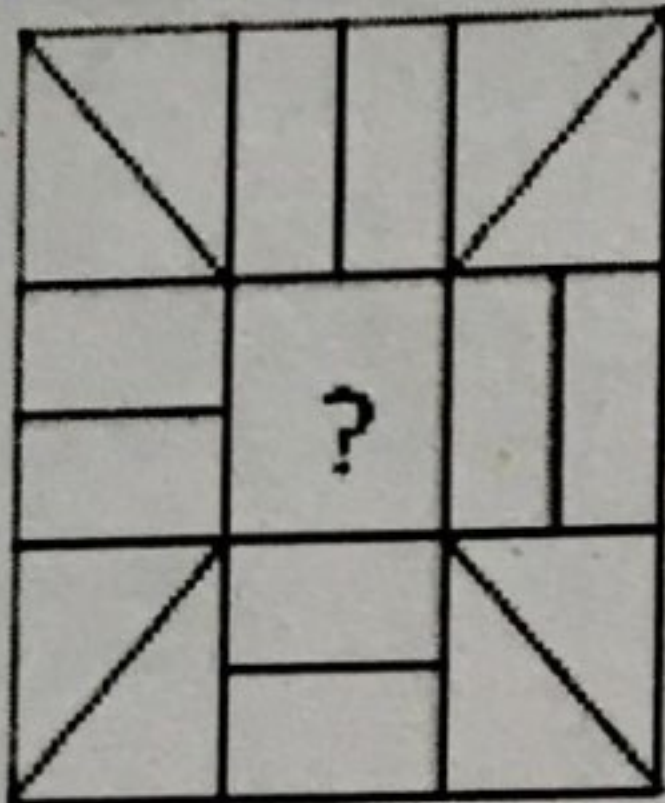


D.

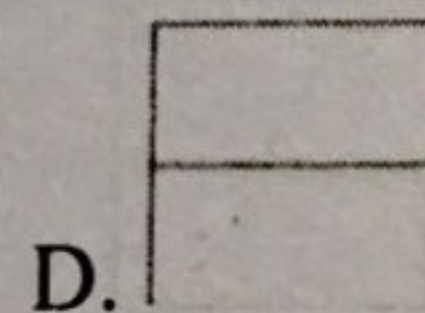
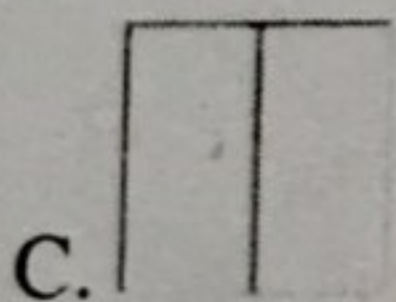
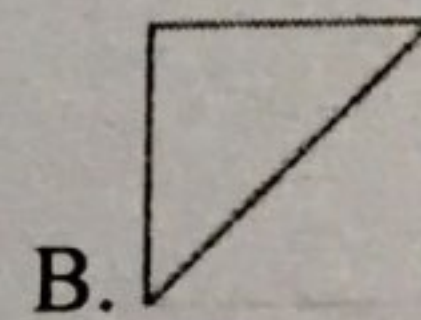
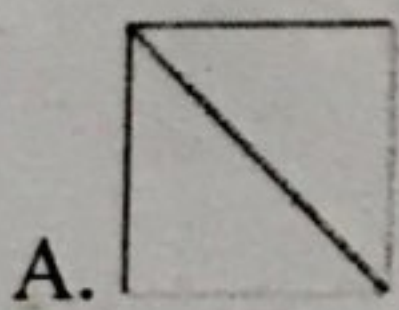




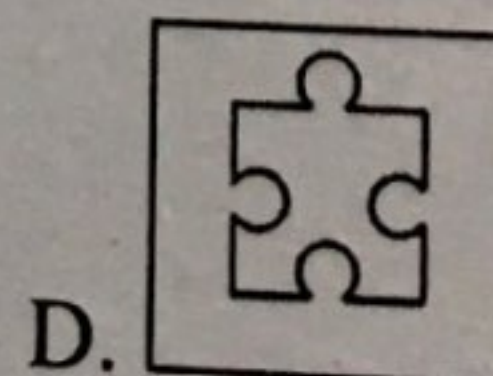
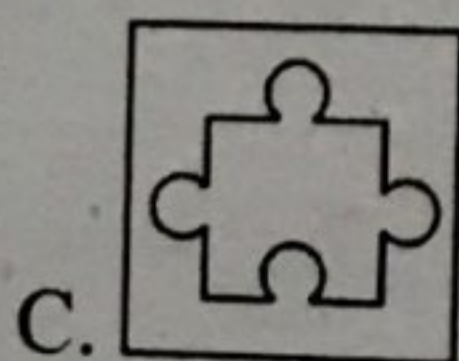
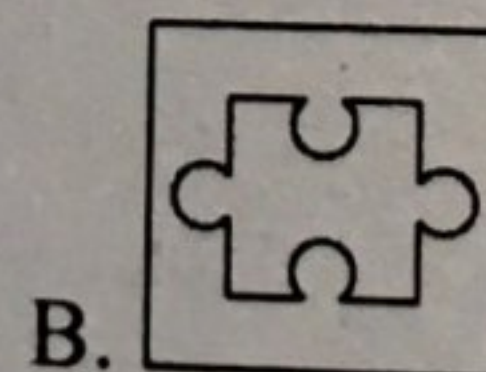
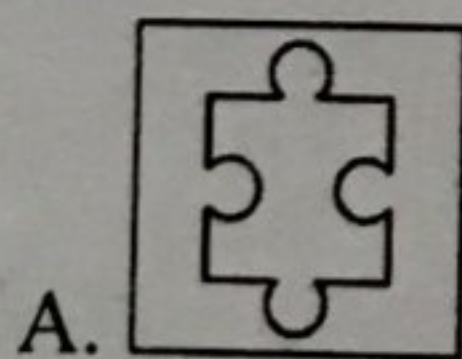
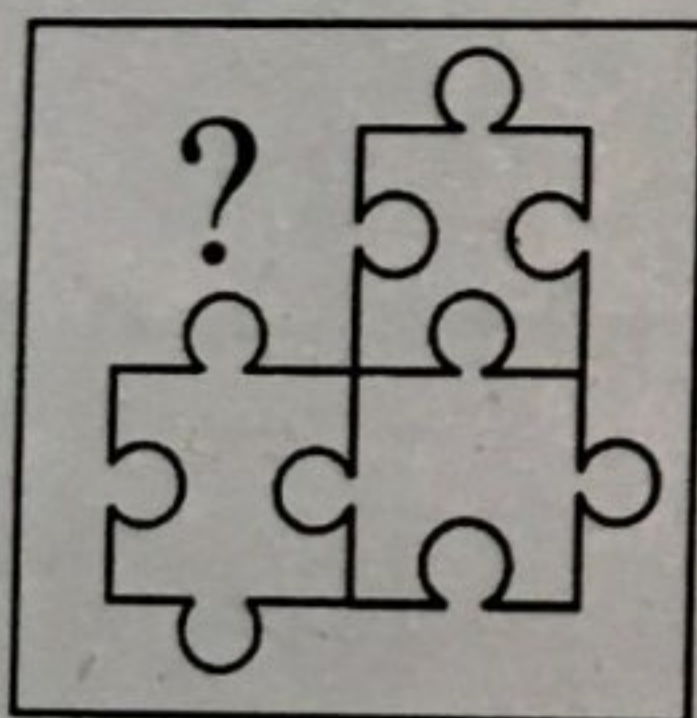
Q. 49



Draw the contents of the middle tile in accordance with the rules of logic already established.



Q. 50





# ANSWER KEY

1	C	11	B	21	B	31	D	41	B
2	B	12	D	22	A	32	B	42	C
3	D	13	B	23	A	33	B	43	A
4	C	14	A	24	D	34	C	44	D
5	C	15	D	25	D	35	A	45	D
6	B	16	D	26	C	36	D	46	D
7	A	17	A	27	B	37	A	47	C
8	B	18	D	28	D	38	D	48	C
9	B	19	A	29	D	39	D	49	A
10	A	20	B	30	B	40	D	50	B



# 2 TOPIC

# LOGICAL PROBLEMS

## INTRODUCTION

The word logic is derived from the Greek word “logos” meaning both “Thought” and “the word expressing thought”

Thus the logic is the science of thought as expressed in languages. This means that the questions on logic are to be solved as per the information given without any concern of the formal validity or truth of the statement i.e., conclusion should follow directly from the statements given.

In **logical problems**, a syllogism is a deductive argument in which conclusion has to be drawn from two or more propositions referred as the premises (Statements).

Here we deal with statements comprising of two or more arguments premises, followed by conclusions.

For better understanding, the structure of argument is given below.

Argument { Statements : All tigers are lions. No cow is lion. Some camel are cows. (Premises)  
I. Some lions are camels.  
II. No camel is tiger.  
III. Some tigers are cows. } Conclusions

Which of the following is most appropriate in the above case

A. Only I

B. Only II

C. Only III

D. I, II and III are inappropriate

In all logical problems we face the statements like, Some A are B, All A are B, Some A are not B, No A are B.

Understanding the sense of these statements is the key to reach out the final and appropriate conclusion.

These facts can be summarized as follows:

	Statement Form	Quantity	Quality
1	Some A are B	Particular	Positive
2	All A are B	Universal	Positive
3	Some A are not B	Particular	Negative
4	No A are B	Universal	Negative



**PRACTICE EXERCISE**

**TYPE-I (WITH TWO PREMISES & TWO CONCLUSIONS)**

**Q.1 Statements:**

Some kings are queens. All queens are beautiful.

**Conclusions:**

I. All kings are beautiful.

II. All queens are kings.

A. Only I

B. Only II

C. I and II

D. I and II are inappropriate

**Q.2 Statements:**

All hill stations have a sun-set point. X is a hill station.

**Conclusions:**

I. X has a sun-set point.

II. Places other than hill stations do not have sun-set points.

A. Only I

B. Only II

C. I and II

D. I and II are inappropriate

**Q.3 Statements:**

All pens are chalks. All chairs are chalks.

**Conclusions:**

I. Some pens are chairs.

II. Some chalks are pens.

A. Only I

B. Only II

C. I and II

D. I and II are inappropriate

**Q.4 Statements:**

Ramzan is always successful. No fool is always successful.

**Conclusions:**

I. Ramzan is a fool.

II. Ramzan is not a fool.

A. Only I

B. Only II

C. I and II

D. I and II are inappropriate



**Q.5 Statements:**

No women teacher can play. Some women teachers are athletes.

**Conclusions:**

- I. Male athletes can play.
- II. Some athletes can play.

A. Only I

B. Only II

C. I and II

D. I and II are inappropriate

**Q.6 Statements:**

All roads are waters. Some waters are boats.

**Conclusions:**

- I. Some boats are roads.
- II. All waters are boats.

A. Only I

B. Only II

C. I and II

D. I and II are inappropriate

**Q.7 Statements:**

No bat is ball. No ball is wicket.

**Conclusions:**

- I. No bat is wicket.
- II. All wickets are bats.

A. Only I

B. Only II

C. I and II

D. I and II are inappropriate

**Q.8 Statements:**

All flowers are trees. No fruit is tree.

**Conclusions:**

- I. No fruit is flower.
- II. Some trees are flowers.

A. Only I

B. Only II

C. I and II

D. I and II are inappropriate



Q.9 Statements:

Some desks are caps. No cap is red.

Conclusions:

- I. Some caps are desks.
- II. No desk is red.

A. Only I

B. Only II

C. I and II

D. I and II are inappropriate

Q.10 Statements:

Some pastries are toffees. All toffees are chocolates.

Conclusions:

- I. Some chocolates are toffees.
- II. Some toffees are not pastries.

A. Only I

B. Only II

C. I and II

D. I and II are inappropriate

### TYPE-II (WITH TWO PREMISES & FOUR CONCLUSIONS)

Q.11 Statements:

All branches are flowers. All flowers are leaves.

Conclusions:

- I. All branches are leaves.
- II. All leaves are branches.
- III. All flowers are branches.
- IV. Some leaves are branches.

A. Only I and III

B. Only I and IV

C. Only II and III

D. Only II and IV



**PMC Topic-2**

**Q.12 Statements:**

Some bags are pockets. No pocket is a pouch.

**Conclusions:**

- I. No bag is a pouch.
- II. Some bags are not pouches.
- III. Some pockets are bags.
- IV. No pocket is a bag,

- A. Only I
- B. Only I and III
- C. Only II and III
- D. None of these

**Q.13 Statements:**

All aeroplanes are trains. Some trains are chairs.

**Conclusions:**

- I. Some aeroplanes are chairs.
- II. Some chairs are aeroplanes.
- III. Some chairs are trains.
- IV. Some trains are aeroplanes.

- A. Only III and IV
- B. Only I and II
- C. Only II and III
- D. III and IV are inappropriate

**Q.14 Statements:**

All politicians are honest. All honest are fair.

**Conclusions:**

- I. Some honest are politicians.
- II. No honest is politician.
- III. Some fair are politicians.
- IV. All fair are politicians.

- A. Only III
- B. Only I
- C. Only I and II
- D. Only I and III



Q.15 Statements:

Some clothes are marbles. Some marbles are bags.

Conclusions:

- I. No cloth is a bag.
- II. All marbles are bags.
- III. Some bags are clothes.
- IV. No marble is a cloth.

A. Only I

B. Only II and III

C. Only IV

D. None of these

**TYPE-III (WITH THREE PREMISES & THREE CONCLUSIONS)**

Q.16 Statements:

All fruits are vegetables. All pens are vegetables. All vegetables are rains.

Conclusions:

- I. All fruits are rains.
- II. All pens are rains.
- III. Some rains are vegetables.

A. Only I and II

B. Only II and III

C. Only I and III

D. I, II and III

Q.17 Statements:

Some pictures are frames. Some frames are idols. All idols are curtains.

Conclusions:

- I. Some curtains are pictures.
- II. Some curtains are frames.
- III. Some idols are frames.

A. Only I and II

B. Only II and III

C. Only I and III

D. I, II and III



**Q.18 Statements:**

Some hills are rivers. Some rivers are deserts. All deserts are roads.

**Conclusions:**

- I. Some roads are rivers.
- II. Some roads are hills.
- III. Some deserts are hills.

A. Only I and II

B. Only I

C. Only II and III

D. I, II and III inappropriate

**Q.19 Statements:**

Some saints are balls. All balls are bats. Some tigers are balls.

**Conclusions:**

- I. Some bats are tigers.
- II. Some saints are bats.
- III. All bats are balls.

A. Only I and II

B. Only II

C. Only I and III

D. Only III

**Q.20 Statements:**

Some pens are books. All schools are books. Some colleges are schools.

**Conclusions:**

- I. Some colleges are pens.
- II. Some pens are schools.
- III. Some colleges are books.

A. Only I and II

B. Only II and III

C. Only I and III

D. None of these



Q.21 Statements:

All trains are buses. No room is bus. All boats are rooms.

Conclusions:

- I. No boat is train.
- II. No bus is boat.
- III. No train is room.

- A. Only I and III
- C. Only II and III

B. Only I and II

D. I, II and III

Q.22 Statements:

Some blades are hammers. Some hammers are knives. Some knives are axes.

Conclusions:

- I. Some axes are hammers.
- II. Some knives are blades.
- III. Some axes are blades.

- A. I, II and III are inappropriate
- C. Only II

B. Only I

D. Only III

Q.23 Statements:

Some boxes are hammers. Some hammers are beads. All beads are rings.

Conclusions:

- I. Some rings are hammers.
- II. Some hammers are boxes.
- III. Some rings are boxes.

A. I, II and III

C. Only I and II

B. Only I

D. Only II and III



**PMC Topic-2**

**Q.24 Statements:**

Some blankets are beds. Some pillows are blankets. All beds are pillows.

**Conclusions:**

- I. Some blankets are pillows.
- II. Some pillows are beds.
- III. Some beds are blankets.

A. Only I

B. Only II

C. Only II and III.

D. I, II and III

**Q.25 Statements:**

All dolls are windows. All bottles are windows. All cars are bottles.

**Conclusions:**

- I. All cars are windows.
- II. Some cars are dolls.
- III. Some windows are cars.

A. Only I and II

B. Only II and III

C. Only I and III

D. I, II and III

**Q.26 Statements:**

All tigers are lions. No cow is lion. Some camels are cows.

**Conclusions:**

- I. Some lions are camels.
- II. No camel- is tiger.
- III. Some tigers are cows.

A. I, II and III are inappropriate

B. Only I

C. Only II

D. Only III



Q.27 Statements:

All flowers are toys. Some toys are trees. Some angels are trees.

Conclusions:

- I. Some angels are toys.
- II. Some trees are flowers.
- III. Some flowers are angels.

A. I, II and III are inappropriate

B. Only I and III

C. Only II

D. Only III

Q.28 Statements:

Some rats are cats. Some cats are dogs. No dog is cow.

Conclusions:

- I. No cow is cat.
- II. No dog is rat.
- III. Some cats are rats.

A. I, II and III

B. Only I and II

C. Only II and III

D. Only III

Q.29 Statements:

All snakes are trees. Some trees are roads. All roads are mountains.

Conclusions:

- I. Some mountains are snakes.
- II. Some roads are snakes.
- III. Some mountains are trees.

A. Only I

B. Only II

C. Only III

D. Both I and II



**Q.30 Statements:**

All trees are flowers. No flower is fruit. All branches are fruits.

**Conclusions:**

- I. Some branches are trees.
- II. No fruit is tree.
- III. No tree is branch.

A. Only I

B. Only III

C. Only II

D. None of these

**Q.31 Statements:**

Some uniforms are covers. All covers are papers. All papers are bags.

**Conclusions:**

- I. All covers are bags.
- II. Some bags are covers, papers and uniforms.
- III. Some uniforms are not papers.

A. Only I

B. Only I and II

C. Only III

D. I, II and III

**Q.32 Statements:**

No rabbit is lion. Some horses are lions. All rabbits are tables.

**Conclusions:**

- I. Some tables are lions.
- II. Some horses are rabbits.
- III. No lion is table.

A. Only III

B. Only II

C. Only II and III

D. None of these



Q.33 Statements:

Some Cakes are Roses. All roses are Trucks. No Trucks are Bricks.

Conclusions:

- I. Some Trucks are Cakes.
- II. Some Bricks are Roses
- III. All Cakes are Trucks

A. Only I

B. Only III

C. Only I and II

D. Only II and III

Q.34 Statements:

All Tigers are Dogs. Some Tigers are Cats. All Cats are Lions.

Conclusions:

- I. Some Dogs are Lions.
- II. All Cats are Dogs.
- III. Some Lions are Tigers.

A. Only I

B. Only II

C. Only I and III

D. I, II and III are inappropriate

Q.35 Statements:

Some Bikes are Cars. All ships are Trains. Some Buses are Cars.

Conclusions:

- I. All Cars are Trains.
- II. Some Buses are Bikes.
- III. Some Cars are Buses.

A. Only I

B. Only I and III

C. Only II and III

D. Only III



**TYPE-IV (WITH THREE PREMISES & FOUR CONCLUSIONS)****Q.36 Statements:**

Some dogs are rats. All rats are trees. Some trees are not dogs.

**Conclusions:**

- I. Some trees are dogs.
- II. All dogs are trees.
- III. All rats are dogs.
- IV. No tree is dog.

A. Only II and III

B. Only I

C. Only I and II

D. None of these

**Q.37 Statements:**

Some bricks are trees. All trees are pens. All pens are boats.

**Conclusions:**

- I. Some boats are bricks.
- II. Some pens are bricks.
- III. Some trees are bricks.
- IV. Some bricks are boats.

A. Only I and II

B. Only III and IV

C. Only I and IV

D. All follows

**Q.38 Statements:**

Some tigers are lions. Some lions are rabbits. Some rabbits are horses.

**Conclusions:**

- I. Some tigers are horses.
- II. Some rabbits are tigers.
- III. Some horses are lions.
- IV. All horses are rabbits.

A. Only IV

B. Only II and IV

C. Only I and II

D. None of these



Q.39 Statements:

All players are spectators. Some spectators are theatres. Some theatres are dramas.

Conclusions:

- I. Some dramas are spectators.
- II. Some players are dramas.
- III. Some theatres are players.
- IV. All spectators are players.

A. Only II and IV

B. Only I and III

C. Only II

D. None of these

Q.40 Statements:

Some papers are cats. All cats are bats. No bat is horse.

Conclusions:

- I. Some papers are horses.
- II. No horse is cat.
- III. Some bats are papers.
- IV. All papers are bats.

A. Only I and II

B. Only II and III

C. Only III and IV

D. Only I and IV



# ANSWER KEY

1	D	11	B	21	D	31	B
2	A	12	C	22	A	32	D
3	B	13	A	23	C	33	A
4	B	14	D	24	D	34	C
5	D	15	D	25	C	35	D
6	D	16	D	26	A	36	B
7	D	17	B	27	A	37	D
8	C	18	B	28	D	38	D
9	A	19	A	29	C	39	D
10	A	20	D	30	D	40	B



# 3 TOPIC INTRODUCTION

## LOGICAL DEDUCTIONS

This section of logical reasoning comprises of questions put in the form of puzzles involving certain numbers of items, persons or things. The candidate is required to analyze the given information, condense it, in a suitable form and deduce the result asked in the question.

**Directions: (Questions 1 to 4): Read the following information to answer the given**

There is a family of six persons G, J, B, E, T and Z. Their professions are teacher, writer, actor, singer, dancer and lawyer but not respectively in the same order. G is a teacher. Z is a dancer. B is neither writer nor actor. E is neither singer nor lawyer. T is an actor. J is a lawyer.

**Q.1 Who among them has a profession of lawyer?**

A. J

B. B

C. E

D. T

**Q.2 Who is the teacher among them?**

A. J

B. B

C. E

D. G

**Q.3 Which profession does E belong to?**

A. Writer

B. Teacher

C. Singer

D. Dancer

**Q.4 Who is dancer among them?**

A. T

B. Z

C. G

D. J

**Directions: (Questions 5 to 7): Read the following information carefully and answer the questions given below:**

Rizwan and Kashif are good in Hockey and Volleyball. Saeed and Rizwan are good in Hockey and Baseball. Ghafoor and Kashif are good in Cricket and Volleyball. Saeed, Ghafoor and Muneeb are good in Football and Baseball.

**Q.5 Who is good in Hockey, Cricket and Volleyball?**

A. Saeed

B. Kashif

C. Rizwan

D. Ghafoor



**Q.6 Who is good in Baseball, Cricket, Volleyball and Football?**

A. Saeed

B. Kashif

C. Ghafoor

D. Rizwan

**Q.7 Who is good in Baseball, Volleyball and Hockey?**

A. Saeed

B. Kashif

C. Rizwan

D. Ghafoor

**Directions: (Questions 8 to 12): Study the following information and answer the questions given below it:**

There is a group of five students A, B, C, D and E from KIPS college. B and E are good in Dramatics and Computer Science. A and B are good in Computer Science and Physics. A, C and D are good in Physics and History. A and C are good in Physics and Mathematics. D and E are good in History and Dramatics.

**Q.8 Who is good in Physics, History and Dramatics?**

A. A

B. B

C. D

D. E

**Q.9 Who is good in Physics, History and Mathematics, but not in Computer Science?**

A. A

B. B

C. C

D. D

**Q.10 Who is good in Computer Science, History and Dramatics?**

A. A

B. B

C. C

D. E

**Q.11 Who is good in History, Physics, Computer Science and Mathematics?**

A. A

B. B

C. C

D. D

**Q.12 Who is good in Physics, Dramatics and Computer Science?**

A. A

B. B

C. D

D. E



Three persons A, B and C wore shirts of black, blue and orange colours (not necessarily in that order) and pants of green, yellow and orange colours (not necessarily in that order). No person wore pant and shirt of the same colour. Further, it is given that

- (i) A did not wear shirt of black colour.
- (ii) B did not wear shirt of blue colour.
- (iii) C did not wear shirt of orange colour.
- (iv) A did not wear pant of green colour.
- (v) B wore pant of orange colour.

Q.13 What were the colours of pant and shirt worn by C, respectively?

- A. Yellow and Black
- B. Yellow and Blue
- C. Green and Blue
- D. Orange and Black

In a group of six women, there are four dancers, four vocal musicians, one actress and three violinists. G and V are among the violinists while J and S do not know how to play on the violin. S and T are among the dancers J, V, S and T are all vocal musicians and two of them are also violinists.

Q.14 If P is an actress, who among the following is both a dancer and a violinist?

- A. J
- B. S
- C. T
- D. P

Four players A, B, C and D are holding 4 cards each. Each of them has an Ace, a King, a Queen and a Jack. All of them have all the suits (spades, hearts, clubs and diamonds).

- (i) A has Ace of spades and Queen of diamonds.
- (ii) B has Ace of clubs and King of diamonds.
- (iii) C has Queen of clubs and King of spades.
- (iv) D has Jack of clubs.

Q.15 Jack of hearts is with

- A. A
- B. B
- C. C
- D. D



**Direction: (Questions 16 to 17): Read the following information and answers the questions given below it.**

- (i) Amna is older than Sanya.
- (ii) Muskan is elder than Amna but younger than Kashmala.
- (iii) Kashmala is elder than Sanya.
- (iv) Sanya is younger than Muskan.
- (v) Gulrukh is the eldest.

**Q.16 Who is the youngest?**

- |             |          |
|-------------|----------|
| A. Kashmala | B. Amna  |
| C. Muskan   | D. Sanya |

**Q.17 Age wise, who is in the middle?**

- |             |          |
|-------------|----------|
| A. Kashmala | B. Amna  |
| C. Muskan   | D. Sanya |

**Q.18 A, B, C, D and E are five friends. A is shorter than B but taller than E. C is the tallest. D is shorter than B and taller than A. Who has two persons taller and two persons shorter than him/her?**

- |      |      |
|------|------|
| A. A | B. B |
| C. C | D. D |

**Q.19 If P is taller than Q, R is shorter than P, S is taller than T but shorter than Q, then who among them is the tallest?**

- |      |      |
|------|------|
| A. P | B. Q |
| C. S | D. T |

- (i) Ghulam Rasool is shorter than Ali but taller than Kamran.
- (ii) Naeem is shorter than Kamran.
- (iii) Jameel is taller than Naeem.
- (iv) Ali is taller than Jameel.

**Q.20 Who among them is the tallest?**

- |           |           |
|-----------|-----------|
| A. Ali    | B. Naeem  |
| C. Kamran | D. Jameel |



Q.21 A, P, R, X, S and Z are sitting in a row. S and Z are in the centre, and A and P are at the ends. R is sitting on the left of A. Then who is sitting on the right of P?

- A. A  
B. S  
C. X  
D. Z

Q.22 In a March Past, seven persons are standing in a row. Q is standing left to R but right to P. O is standing right to N and left to P. Similarly, S is standing right to R and left to T. Find out who is standing in the middle.

- A. P  
B. Q  
C. R  
D. O

Q.23 In the Olympic games, the flags of six nations were flown on the masts in the following way:

The flag of America was to the left of Pakistan and to the right of the flag of France. The flag of England was on the right of the Pakistan flag but was to the left of the flag of Japan, which was to the left of the flag of China.

Find the two flags which are in the centre.

- A. Pakistan and England  
B. America and Pakistan  
C. Japan and England  
D. America and England

In a cricket season, Pakistan defeated Australia twice, West Indies defeated Pakistan twice, Australia defeated West Indies twice, Pakistan defeated New Zealand twice, and West Indies defeated New Zealand twice.

Q.24 Which country has lost the greatest number of times?

- A. Pakistan  
B. Australia  
C. New Zealand  
D. West Indies

There is a family of six persons E, I, R, K, T, and Y. I and R are sisters. T is mother of R and E is son-in-law of K. K is father of I. Y is grandson of T and I is mother of Y.

Q.25 How is R related to Y?

- A. Aunt  
B. Niece  
C. Sister  
D. Mother



H, Q, C, L, N and F are six members of a family. There are two married couples among them. C is the mother of H and F. N is the father of L. H is the grandson of Q.

The total number of female members in the family is three.

**Q.26 How is Q related to F?**

- |           |                 |
|-----------|-----------------|
| A. Sister | B. Grandmother  |
| C. Wife   | D. Data missing |

P, Q, R, S, T and U are six members of a family. Two married couples are there. Q is a priest and the father of T. U is grandfather of R and is a lawyer. S is a doctor and she is the grandmother of T. Other professionals include one priest, one lawyer, one engineer, one doctor and two graduates in the family.

**Q.27 Who is the husband of P?**

- |      |      |
|------|------|
| A. R | B. U |
| C. Q | D. S |

**Direction: (Question 28 to 30): Read the following information to answer the given**

A, B, C, D and E are five friends. B is elder to E, but not as tall as C. C is younger to A, and is taller to D and E. A is taller to D, but younger than E. D is elder to A but is shortest in the group.

**Q.28 Who among the following is the eldest?**

- |      |                  |
|------|------------------|
| A. A | B. B             |
| C. C | D. None of these |

**Q.29 Which of the following pairs of students is elder to D?**

- |       |                  |
|-------|------------------|
| A. BA | B. BC            |
| C. BE | D. None of these |

**Q.30 If F, another friend, is taller than C, how many of them will be between F and E according to their height?**

- |          |                  |
|----------|------------------|
| A. Three | B. One           |
| C. Two   | D. None of these |



**Direction: (Question 31 to 35): Read the following information to answer the given**

There are six persons A, B, C, D, E and F. C is the sister of F. B is the brother of E's husband. D is the father of A and grandfather of F. There are two fathers, three brothers and a mother in the group.

**Q.31 Who is the mother?**

- |      |      |
|------|------|
| A. A | B. B |
| C. D | D. E |

**Q.32 Who is E's husband?**

- |      |      |
|------|------|
| A. B | B. C |
| C. A | D. F |

**Q.33 How many male members are there in the group?**

- |          |         |
|----------|---------|
| A. One   | B. Two  |
| C. Three | D. Four |

**Q.34 How is F related to E?**

- |          |             |
|----------|-------------|
| A. Uncle | B. Husband  |
| C. Son   | D. Daughter |

**Q.35 Which of the following is a group of brothers?**

- |        |        |
|--------|--------|
| A. ABF | B. ABD |
| C. BFC | D. BDF |

**Q.36 In a joint family, there are father, mother, 3 married sons and one unmarried daughter. Of the sons, two have 2 daughters each, and one has a son. How many female members are there in the family?**

- |      |      |
|------|------|
| A. 2 | B. 3 |
| C. 6 | D. 9 |

**Q.37 A family has a man, his wife, their four sons and their wives. The family of every son also has 3 sons and one daughter. Find out the total number of male members in the whole family.**

- |       |       |
|-------|-------|
| A. 4  | B. 8  |
| C. 12 | D. 17 |



- Q.38** A rat runs 20' towards East and turns to right, runs 10' and turns to right, runs 9' and again turns to left, runs 5' and then turns to left, runs 12' and finally turns to left and runs 6'. Now, which direction is the rat facing?
- A. East  
B. West  
C. North  
D. South
- Q.39** Two ladies and two men are playing cards and are seated at North, East, South and West of a table. No lady is facing East. Persons sitting opposite to each other are not of the same sex. One man is facing South. Which directions are the ladies facing?
- A. East and West  
B. South and East  
C. North and East  
D. North and West
- Q.40** There are four towns P, Q, R and T. Q is to the South-west of P, R is to the East of Q and South-east of P, and T is to the North of R in line with QP. In which direction of P is T located?
- A. South-east  
B. North  
C. North-east  
D. East
- Q.41** The post office is to the east of the school while my house is to the south of the school. The market is to the north of the post office. If the distance of the market from the post office is equal to the distance of my house from the school, in which direction is the market with respect to my school?
- A. North  
B. East  
C. North-east  
D. South-west
- Q.42** Kamran walks 10km towards North. From there he walks 6km towards South. Then, he walks 3km towards East. How far and in which direction is he with reference to his starting point?
- A. 5 km West  
B. 7 km West  
C. 7 km East  
D. 5 km North-east
- Q.43** You go North, turn right, then right again and then go to the left. In which direction are you now?
- A. North  
B. South  
C. East  
D. West



Q.44 P, Q, R, S, T, U, V, W are sitting around a round table in the same order, for group discussion at equal distances. Their positions are clockwise. If V sits in the north, then what will be the position of S?

A. East

B. South-east

C. South

D. South-west

Q.45 P, Q, R and S are playing a game of carrom. P, R and S, Q are partners. S is to the right of R who is facing west. Then, Q is facing

A. North

B. South

C. East

D. West

## ANSWER KEY

1	A	11	A	21	C	31	D	41	C
2	D	12	B	22	B	32	C	42	D
3	A	13	C	23	A	33	D	43	C
4	B	14	C	24	C	34	C	44	D
5	B	15	A	25	A	35	A	45	A
6	C	16	D	26	B	36	D		
7	C	17	C	27	C	37	D		
8	C	18	D	28	B	38	C		
9	C	19	A	29	D	39	D		
10	D	20	A	30	D	40	C		



## INTRODUCTION

A course of action is 'a step or administrative decision to be taken for improvement, follow-up or further action in regard to the problem, policy etc., on the basis of the information given in the statement'.

The questions in this section, thus, involve finding the appropriate course of action, considering the problem or policy being talked about in the statement.

In these type of questions, a statement is given followed by two courses of action numbered I and II. It is required to grasp the statement, analyze the problem or policy it mentions and then decide which of the courses of action logically follow / most appropriate.

### Q.1 Statement:

The officer Incharge of a company had a hunch that some money was missing from the safe.

#### Courses of action:

- I) He should get it recounted with the help of the staff and check it with the balance sheet.
- II) He should inform the police.
- A. If only I is most appropriate
- B. If only II is most appropriate
- C. If either I or II is most appropriate
- D. If neither I nor II is most appropriate
- E. If both I and II are most appropriate

### Q.2 Statement:

Japan is not likely to grant Pakistan's request for a \$500 million fast disbursing loan for the current year.

#### Courses of action:

- I) Pakistan should approach other countries to get a loan.
- II) Pakistan should persuade Japan to grant the loan to meet its immediate demand of foreign exchange.
- A. If only I is most appropriate
- B. If only II is most appropriate
- C. If either I or II is most appropriate
- D. If neither I nor II is most appropriate
- E. If both I and II are most appropriate



**Q.3 Statement:**

The Librarian finds some cases in which the pages from certain books issued from the library, are torn.

**Courses of action:**

I) The Librarian should keep a record of books issued to each student, and if the pages are found torn, strict measures should be taken against the child who had been issued that book.

II) Some funds should be collected from the children collectively to renovate the library.

- A. If only I is most appropriate
- B. If only II is most appropriate
- C. If either I or II is most appropriate
- D. If neither I nor II is most appropriate
- E. If both I and II are most appropriate

**Q.4 Statement:**

Most of the development plans develop in papers only.

**Courses of action:**

I) The incharges should be instructed to supervise the field work regularly.

II) The supply of paper to such departments should be cut short.

- A. If only I is most appropriate
- B. If only II is most appropriate
- C. If either I or II is most appropriate
- D. If neither I nor II is most appropriate
- E. If both I and II are most appropriate

**Q.5 Statement:**

The Federal Investigation Agency (FIA) receives the complaint of an officer taking bribe to do the duty he is supposed to.

**Courses of action:**

I) FIA should try to catch the officer red-handed and then take a strict action against him.

II) FIA should wait for some more complaints about the officer to be sure about the matter.

- A. If only I is most appropriate
- B. If only II is most appropriate
- C. If either I or II is most appropriate
- D. If neither I nor II is most appropriate
- E. If both I and II are most appropriate



**Q.6 Statement:**

Many medical and engineering graduates are taking up jobs in administrative services and in banks.

**Courses of action:**

- I) All the professionals should be advised to refrain from taking up such jobs.
  - II) The government should appoint a committee to find out the reasons for these professionals taking up such jobs and to suggest remedial measures.
- A. If only I is most appropriate
  - B. If only II is most appropriate
  - C. If either I or II is most appropriate
  - D. If neither I nor II is most appropriate
  - E. If both I and II are most appropriate

**Q.7 Statement:**

Due to substantial reduction in fares by different airline services, large number of passengers so far travelling by upper classes in trains have switched over to airline services.

**Courses of action:**

- I) The railways should immediately reduce the fare structure of the upper classes substantially to retain its passengers.
  - II) The railways should reduce the capacity of upper classes in all the trains to avoid loss.
- A. If only I is most appropriate
  - B. If only II is most appropriate
  - C. If either I or II is most appropriate
  - D. If neither I nor II is most appropriate
  - E. If both I and II are most appropriate



Q.8 Statement:

In spite of the Principal's repeated warnings, a child was caught exploding crackers secretly in the school.

**Courses of action:**

- I) All the crackers should be taken away from the child and he should be threatened not to do it again.
  - II) The child should be severely punished for his wrong act.
- A. If only I is most appropriate
  - B. If only II is most appropriate
  - C. If either I or II is most appropriate
  - D. If neither I nor II is most appropriate
  - E. If both I and II are most appropriate

Q.9 Statement:

A large number of people in ward X of the city are diagnosed to be suffering from a fatal malaria type.

**Courses of action:**

- I) The city municipal authority should take immediate steps to carry out extensive fumigation in ward X.
  - II) The people in the area should be advised to take steps to avoid mosquito bites.
- A. If only I is most appropriate
  - B. If only II is most appropriate
  - C. If either I or II is most appropriate
  - D. If neither I nor II is most appropriate
  - E. If both I and II are most appropriate



**Q.10 Statement:**

Certain mining industries in Gilgit may come to a standstill because of the notification issued by the Department of Environment and Forest banning mining operations and industries alike within 25kms of National Park, the game sanctuary and reserve forest areas.

**Courses of action:**

- I) The Department should be asked to immediately withdraw the notification.
  - II) The government should make effort to shift the parks, sanctuaries and reserve forests to other non-mining areas.
- A. If only I is most appropriate
  - B. If only II is most appropriate
  - C. If either I or II is most appropriate
  - D. If neither I nor II is most appropriate
  - E. If both I and II are most appropriate

**Q.11 Statement:**

A recent study shows that children below five, die in the cities of the developing countries mainly from diarrhea and parasitic intestinal worms.

**Courses of action:**

- I) Governments of the developing countries should take adequate measures to improve the hygienic conditions in the cities.
  - II) Children below five years in the cities of the developing countries need to be kept under periodic medical check-up.
- A. If only I is most appropriate
  - B. If only II is most appropriate
  - C. If either I or II is most appropriate
  - D. If neither I nor II is most appropriate
  - E. If both I and II are most appropriate



Q.12 **Statement:**

A large number of people visiting Pakistan from country X have been tested positive for carrying viruses of a killer disease.

**Courses of action:**

- I) The government of Pakistan should immediately put a complete ban on people coming to Pakistan from country X including those Pakistanis who are settled in country X.
  - II) The government of Pakistan should immediately set up detection centres at all its airports and seaports to identify and quarantine those who are tested positive.
- A. If only I is most appropriate
  - B. If only II is most appropriate
  - C. If either I or II is most appropriate
  - D. If neither I nor II is most appropriate
  - E. If both I and II are most appropriate

Q.13 **Statement:**

Courts take too long in deciding important disputes of various departments.

**Courses of action:**

- I) Courts should be ordered to speed up matters.
  - II) Special powers should be granted to officers to settle disputes concerning their department.
- A. If only I is most appropriate
  - B. If only II is most appropriate
  - C. If either I or II is most appropriate
  - D. If neither I nor II is most appropriate
  - E. If both I and II are most appropriate

Q.14 **Statement:**

Many cases of cholera were reported from a nearby village.

**Courses of action:**

- I) The question should be raised in the Legislative Assembly.
  - II) A team of doctors should be rushed to the village.
- A. If only I follow
  - B. If only II follows
  - C. If either I or II follows
  - D. If neither I nor II follows
  - E. If both I and II follows



**Q.15 Statement:**

People residing in some tribal areas are far from education.

**Courses of action:**

- I) Schools for children and adults, should be opened there.
  - II) Social workers should be entrusted with the job of educating them.
- A. If only I follow
  - B. If only II follows
  - C. If either I or II follows
  - D. If neither I nor II follows
  - E. If both I and II follows

**Q.16 Statement:**

The Government has decided not to provide financial support to voluntary organizations from next five-year plan and has communicated that all such organizations should raise funds to meet their financial needs.

**Courses of action:**

- I) Voluntary organizations should collaborate with foreign agencies.
  - II) They should explore other sources of financial support.
- A. If only I follow
  - B. If only II follows
  - C. If either I or II follows
  - D. If neither I nor II follows
  - E. If both I and II follows

**Q.17 Statement:**

If the retired Professors of the same Institutes are also invited to deliberate on restructuring of the organization, their contribution may be beneficial to the institute.

**Courses of action:**

- I) Management may seek opinion of the employees before calling retired professors.
  - II) Management should involve experienced people for the systematic restructuring of the organization
- A. If only I follow
  - B. If only II follows
  - C. If either I or II follows
  - D. If neither I nor II follows
  - E. If both I and II follows



**Q.18 Statement:**

The Committee has criticized the institute for its failure to implement a dozen of regular programmes despite an increase in the staff strength and not drawing up a firm action plan for studies and research.

**Courses of action:**

- I) The broad objectives of the Institute should be redefined to implement a practical action plan.
- II) The Institute should give a report on reasons for not having implemented the planned programmes.

- A. If only I follow
- B. If only II follows
- C. If either I or II follows
- D. If neither I nor II follows
- E. If both I and II follows

**Q.19 Statement:**

Mr. X, an active member of the Union, often insults his superiors in the office with his rude behavior.

**Courses of action:**

- I) He should be transferred to some other department.
  - II) The matter should be referred to the Union.
- A. If only I follow
  - B. If only II follows
  - C. If either I or II follows
  - D. If neither I nor II follows
  - E. If both I and II follows



**Q.20 Statement:**

The killer enteric fever has so far claimed 100 lives in some tribal villages during the past three weeks.

**Courses of action:**

- I) The residents of these villages should immediately be shifted to a non-infected area.
- II) The Government should immediately send a medical squad to this area, restrict spread of the killer disease.

- A. If only I follow
- B. If only II follows
- C. If either I or II follows
- D. If neither I nor II follows
- E. If both I and II follows

**Q.21 Statement:**

Majority of the students in many schools do not pass in the final examination.

**Courses of action:**

- I) These schools should be closed down as these have become unproductive.
- II) The teachers of these schools should immediately be retrenched.

- A. If only I follow
- B. If only II follows
- C. If either I or II follows
- D. If neither I nor II follows
- E. If both I and II follows

**Q.22 Statement:**

The Kharif crops have been affected by the insects for consecutive three years in the district and the farmers harvested less than fifty percent of produce during these years.

**Courses of action:**

- I) The farmers should seek measures to control the attack of insects to protect their crops next year.
- II) The Government should increase the support price of Kharif crops considerably to protect the economic interests of farmers.

- A. If only I follow
- B. If only II follows
- C. If either I or II follows
- D. If neither I nor II follows
- E. If both I and II follows



Q.23 Statement:

A large number of people die every year due to drinking polluted water during the summer.

Courses of action:

I) The government should make adequate arrangements to provide safe drinking water to all its citizens.

II) The people should be educated about the dangers of drinking polluted water.

- A. If only I follow
- B. If only II follows
- C. If either I or II follows
- D. If neither I nor II follows
- E. If both I and II follows

Q.24 Statement:

The teenager was arrested by the police for taking drugs.

Courses of action:

I) The teenager should be meted with corporal punishment by the police.

II) The teenager should be sent to a drug rehabilitation centre.

- A. If only I follow
- B. If only II follows
- C. If either I or II follows
- D. If neither I nor II follows
- E. If both I and II follows

Q.25 Statement:

Floods may create havoc in the country this year too.

Courses of action:

I) The Government should be on the alert to evacuate flood-affected victims.

II) People should not be afraid of floods.

- A. If only I follow
- B. If only II follows
- C. If either I or II follows
- D. If neither I nor II follows
- E. If both I and II follows



**Q.26 Statement:**

Every year, at the beginning or at the end of the monsoons, we have some cases of conjunctivitis, but this year it seems to be a major epidemic witnessed after nearly four years.

**Courses of action:**

- I) Precautionary measures should be taken after every four years to check this epidemic.
- II) People should be advised to drink boiled water during rainy season.

- A. If only I follow
- B. If only II follows
- C. If either I or II follows
- D. If neither I nor II follows
- E. If both I and II follows

**Q.27 Statement:**

There has been an unprecedented increase in the number of successful candidates in this year's School Leaving Certificate Examination.

**Courses of action:**

- I) The government should make arrangements to increase number of seats of intermediate courses in existing colleges.
- II) The government should take active steps to open new colleges to accommodate all these successful candidates.

- A. If only I follow
- B. If only II follows
- C. If either I or II follows
- D. If neither I nor II follows
- E. If both I and II follows



Q.28 Statement:

Three persons were caught with huge arms and ammunition in the city.

**Courses of action:**

- I) Police should be instructed for night patrolling.
- II) The three persons should be set free and their movements should be carefully watched to nab the other criminals.
- A. If only I follow
- B. If only II follows
- C. If either I or II follows
- D. If neither I nor II follows
- E. If both I and II follows

Q.29 Statement:

There is substantial increase in the number of accidents causing deaths and severe injuries due to malfunctioning of the traffic signals.

**Courses of action:**

- I) The traffic police should immediately post traffic personnel at the junctions.
- II) The signal system should immediately be repaired or replaced.
- A. If only I follow
- B. If only II follows
- C. If either I or II follows
- D. If neither I nor II follows
- E. If both I and II follows

Q.30 Statement:

As many as ten coaches of a passenger train have derailed and blocked both pairs of the railway tracks.

**Courses of action:**

- I) The railway authorities should immediately send men and equipment to the spot to clear the railway tracks.
- II) All the trains running in both the directions should be diverted to other routes.
- A. If only I follow
- B. If only II follows
- C. If either I or II follows
- D. If neither I nor II follows
- E. If both I and II follows



**Q.31 Statement:**

Most of the students who study in premier engineering colleges in Pakistan migrate to developed nations for better prospects in their professional pursuits.

**Courses of action:**

- I) All the students joining these colleges should be asked to sign a bond at the time of admission that they will remain in Pakistan at least for twenty years after they complete education.
- II) All those students should be asked to pay the entire cost of their education which the government subsidizes who desire to settle in the developed nations.

- A. If only I follow
- B. If only II follows
- C. If either I or II follows
- D. If neither I nor II follows
- E. If both I and II follows

**Q.32 Statement:**

The local government has agreed to provide necessary infrastructural facilities to the proposed ABC trust's project of supply of clean water to city 'P'.

**Courses of action:**

- I) The local government should provide necessary land to the trust by completing due formalities.
- II) The local government should facilitate obtaining electricity and other permissions to the trust.

- A. If only I follow
- B. If only II follows
- C. If either I or II follows
- D. If neither I nor II follows
- E. If both I and II follows



**Q.33 Statement:**

The bike dealer found that there was a great response for the new ABC's bike booking with long queues of people complaining about the duration of business hours and arrangements.

**Courses of action:**

- I) People should bring lunch and snacks while going for bike ABC's booking and be ready to spend several hours.
  - II) Arrangement should be made for more booking desks and increase business hours to serve more people in less time.
- A. If only I follow
  - B. If only II follows
  - C. If either I or II follows
  - D. If neither I nor II follows
  - E. If both I and II follows

**Q.34 Statement:**

The vegetable traders feel that the prices of onions will again go up shortly in the state A.

**Courses of action:**

- I) The 'A' state government should purchase and store a sufficient quantity of onion in advance to control price.
  - II) The 'A' state government should make an available network of fair-price shops for the sale of onions during periods of shortage.
- A. If only I follow
  - B. If only II follows
  - C. If either I or II follows
  - D. If neither I nor II follows
  - E. If both I and II follows



**Q.35 Statement:**

The LDA has fixed for the investors a validity period of one year for transfer from some of its listed schemes.

**Courses of action:**

- I) The investors should be duly informed about the validity period.
  - II) List of schemes covered under this validity period should be communicated.
- A. If only I follow
  - B. If only II follows
  - C. If either I or II follows
  - D. If neither I nor II follows
  - E. If both I and II follows

**Q.36 Statement:**

The condition of NH-5 is too bad because of heavy transportation.

**Courses of action:**

- I) The government should repair it immediately.
  - II) The government should tell the people to use an alternate road.
- A. If only I follow
  - B. If only II follows
  - C. If either I or II follows
  - D. If neither I nor II follows
  - E. If both I and II follows

**Q.37 Statement:**

Mrs. X is diagnosed with lung cancer.

**Courses of action:**

- I) She should be taken to abroad for best overseas medical treatment.
  - II) Find the best hospital and best doctor in the city and start the treatment immediately.
- A. If only I follow
  - B. If only II follows
  - C. If either I or II follows
  - D. If neither I nor II follows
  - E. If both I and II follows



**Q.38 Statement:**

Every citizen of a country should pay tax to the Government.

**Courses of action:**

- I) The government should aware and educate people about income tax.
- II) The government should take strict action against income tax fraudulent.

- A. If only I follow
- B. If only II follows
- C. If either I or II follows
- D. If neither I nor II follows
- E. If both I and II follows

**Q.39 Statement:**

Since its launch in 1947, the PIA has so far accumulated losses accounting to Rs.200 crore.

**Courses of action:**

- I) PIA should be directed to reduce unnecessary expenditure and to hike airfare.
- II) An aid of Rs. 250 crore should be provided to PIA to make the airline economically viable.

- A. If only I follow
- B. If only II follows
- C. If either I or II follows
- D. If neither I nor II follows
- E. If both I and II follows

**Q.40 Statement:**

There has been large number of cases of internet hacking in the recent months creating panic among the internet users.

**Courses of action:**

- I) The government machinery should make an all-out effort to nab those who are responsible and put them behind bars.
- II) The internet users should be advised to stay away from using internet till the culprits are caught.

- A. If only I follow
- B. If only II follows
- C. If either I or II follows
- D. If neither I nor II follows
- E. If both I and II follows



# ANSWER KEY

1	A	11	E	21	D	31	B
2	C	12	B	22	E	32	E
3	A	13	E	23	E	33	B
4	A	14	B	24	B	34	E
5	A	15	A	25	A	35	E
6	B	16	B	26	D	36	A
7	A	17	B	27	A	37	C
8	B	18	E	28	A	38	E
9	E	19	D	29	C	39	A
10	D	20	B	30	E	40	A



# 5 TOPIC

## CAUSE AND EFFECT

### INTRODUCTION

When examining events, people naturally seek to explain why things happened. This search often results in cause-and-effect reasoning.

Basically, causality occurs when one event is said to make another occur. The cause is the event that makes the other occur; the effect is the event that follows from the cause. Thus, the cause must occur before the effect and the effect always happens at some point of time after the cause.

The question on cause-and-effect reasoning are mainly designed to decide on a student's ability to analyze a pair of given statements and to correlate them in terms of cause and effect. Five possibilities may arise:

- I. The contents of the first statement form the direct cause of the result discussed in the second statement;
- II. The fact in the first statement is the effect of that mentioned in the second statement i.e., the second statement expresses the cause that leads to the condition mentioned in the first;
- III. Both the statements express generalized results that may not be backed by any specific cause but may influence certain other factors;
- IV. Both the statements are independent and may be explained as effects of different, independent causes;
- V. The effects in both the given statements may be caused or triggered by a third unmentioned event which may thus be called the common cause of the given events.

The following examples will make the idea clear.

### ILLUSTRATIVE EXAMPLES

#### Directions:

In each of the following questions, two statements numbered I and II are given. There may be cause and effect relationship between the two statements. These two statements may be the effect of the same cause or independent causes. These statements may be independent causes without having any relationship. Read both the statements in each question and mark your answer accordingly.

Give answer (a) if statement I is the cause and statement II is its effect;

Given answer (b) if statement II is the cause and statement I is its effect;

Given answer (c) if both the statements I and II are independent causes;

Given answer (d) if both the statements I and II are effects of independent causes;

Given answer (e) if both the statements I and II are effects of some common cause.



**PMC Topic-5****Example. 1**

- I. The local traders' association urged all its members to close down their shops for a day to protest against the government's new tax policy.
- II. Many shopkeepers decided to close down their shops for the day and gave a day off to their employees.

**Solution:**

Clearly, the association's decision to go for a shutdown' on a massive scale to protest against the government's new policy would have instigated the shopkeepers to keep their shops closed. Thus, I mention the direct cause for the effect in II.

Hence, the answer is (a).

**Example. 2**

- I. The prices of petroleum products dropped marginally last week.
- II. The state government reduced the tax on petroleum products last week.

**Solution:**

Clearly, a cut in the tax or duty on a certain product is bound to cause a reduction in the price of the product. Thus, II is the cause of the effect in I.

Hence, the answer is (b).

**Example. 3**

- I. The staff of Airport authorities called off the strike they were observing in protest against privatization.
- II. The staff of Airport authorities went on strike anticipating a threat to their jobs.

**Solution:**

Clearly, calling off the strike and going on strike are events that may not be backed by the same cause.

Thus, they must have been effects triggered by separate independent causes.

Hence, the answer is (d).



# PRACTICE EXERCISE

## Directions:

In each of the following questions, two statements numbered I and II are given. There may be cause and effect relationship between the two statements. These two statements may be the effect of the same cause or independent causes. These statements may be independent causes without having any relationship. Read both the statements in each question and mark your answer as:

- A. If statement I is the cause and statement II is its effect;
- B. If statement II is the cause and statement, I is its effect;
- C. If both the statements I and II are independent causes;
- D. If both the statements I and II are effects of independent causes;
- E. If both the statements I and II are effects of some common cause;

Q.1

I. Past few months, Babar is behaving abnormally.

II. Babar's father had taken him to a doctor yesterday.

- A. If statement I is the cause and statement II is its effect;
- B. If statement II is the cause and statement, I is its effect;
- C. If both the statements I and II are independent causes;
- D. If both the statements I and II are effects of independent causes;
- E. If both the statements I and II are effects of some common cause;

Q.2

I. The middle-class society has improved their quality of living constantly in the last few years.

II. Economical standards in Pakistan is improving remarkably.

- A. If statement I is the cause and statement II is its effect;
- B. If statement II is the cause and statement, I is its effect;
- C. If both the statements I and II are independent causes;
- D. If both the statements I and II are effects of independent causes;
- E. If both the statements I and II are effects of some common cause;



**PMC Topic-5****Q.3**

- I. The government has taken the new initiative in which the fee charged by the unaided institutions has been reduced as compared to last year.**
- II. The students have protested against the high fee last year.**
- A. If statement I is the cause and statement II is its effect;  
B. If statement II is the cause and statement, I is its effect;  
C. If both the statements I and II are independent causes;  
D. If both the statements I and II are effects of independent causes;  
E. If both the statements I and II are effects of some common cause;

**Q.4**

- I. The unemployment rate has been increased drastically in the last few years.**
- II. A large number of candidates have applied for a post in Bank.**
- A. If statement I is the cause and statement II is its effect;  
B. If statement II is the cause and statement, I is its effect;  
C. If both the statements I and II are independent causes;  
D. If both the statements I and II are effects of independent causes;  
E. If both the statements I and II are effects of some common cause;

**Q.5**

- I. Stefan's English-speaking power is very less.**
- II. Stefan has decided to join Saint Pauls English coaching class.**
- A. If statement I is the cause and statement II is its effect;  
B. If statement II is the cause and statement, I is its effect;  
C. If both the statements I and II are independent causes;  
D. If both the statements I and II are effects of independent causes;  
E. If both the statements I and II are effects of some common cause;



**Q.6**

- I. The government has increased the rate of liquefied petroleum gas by 10% from the immediate response.
- II. The cost of production, maintenance and distribution of LPG is increased by 10% for the government.

- A. If statement I is the cause and statement II is its effect;  
B. If statement II is the cause and statement, I is its effect;  
C. If both the statements I and II are independent causes;  
D. If both the statements I and II are effects of independent causes;  
E. If both the statements I and II are effects of some common cause;

**Q.7**

- I. She got admitted into one of the top colleges.
- II. She worked day and night to achieve a good score in the entrance exam.

- A. If statement I is the cause and statement II is its effect;  
B. If statement II is the cause and statement, I is its effect;  
C. If both the statements I and II are independent causes;  
D. If both the statements I and II are effects of independent causes;  
E. If both the statements I and II are effects of some common cause;

**Q.8**

- I. Heavy rains totally flooded the area.
- II. Residents of the area have been moved temporarily to other parts of the city.

- A. If statement I is the cause and statement II is its effect;  
B. If statement II is the cause and statement, I is its effect;  
C. If both the statements I and II are independent causes;  
D. If both the statements I and II are effects of independent causes;  
E. If both the statements I and II are effects of some common cause;



**Q.9**

- I. There was a huge rush of people to the Passport Office last Friday.**
- II. The authorities had decided to close it down for a month and relocate elsewhere.**
- A. If statement I is the cause and statement II is its effect;
- B. If statement II is the cause and statement, I is its effect;
- C. If both the statements I and II are independent causes;
- D. If both the statements I and II are effects of independent causes;
- E. If both the statements I and II are effects of some common cause;

**Q.10**

- I. It is the aim of the city's civic authority to get the air pollution reduced by 20% in the next two months.**
- II. The number of asthma cases in the city is constantly increasing.**
- A. If statement I is the cause and statement II is its effect;
- B. If statement II is the cause and statement, I is its effect;
- C. If both the statements I and II are independent causes;
- D. If both the statements I and II are effects of independent causes;
- E. If both the statements I and II are effects of some common cause;

**Q.11**

- I. The university authority has instructed all the colleges under its jurisdiction to ban use of all phones inside the college premises.**
- II. Majority of the teachers of the colleges signed a joint petition to the university complaining the disturbances caused by cell phone ring-tones inside the classrooms.**
- A. If statement I is the cause and statement II is its effect;
- B. If statement II is the cause and statement, I is its effect;
- C. If both the statements I and II are independent causes;
- D. If both the statements I and II are effects of independent causes;
- E. If both the statements I and II are effects of some common cause;



Q.12

- I. The performance of most of the students in final exam of class X in the school run by the Government was excellent.
  - II. Many teachers of the Government schools left the school and joined private schools.
- A. If statement I is the cause and statement II is its effect;
  - B. If statement II is the cause and statement, I is its effect;
  - C. If both the statements I and II are independent causes;
  - D. If both the statements I and II are effects of independent causes;
  - E. If both the statements I and II are effects of some common cause;

Q.13

- I. The employees of the biggest bank in the country have given an indefinite strike call starting from third of the next month.
  - II. The employees of the Federal Government have withdrawn their week-long demonstrations.
- A. If statement I is the cause and statement II is its effect;
  - B. If statement II is the cause and statement, I is its effect;
  - C. If both the statements I and II are independent causes;
  - D. If both the statements I and II are effects of independent causes;
  - E. If both the statements I and II are effects of some common cause;

Q.14

- I. The farmers have decided against selling their kharif crops to the Government agencies.
  - II. The Government has reduced the procurement price of kharif crops starting from last month to the next six months.
- A. If statement I is the cause and statement II is its effect;
  - B. If statement II is the cause and statement, I is its effect;
  - C. If both the statements I and II are independent causes;
  - D. If both the statements I and II are effects of independent causes;
  - E. If both the statements I and II are effects of some common cause;



**PMC Topic-5****Q.15**

- I. There is sharp decline in the production of oil seeds this year.**
- II. The Government has decided to increase the import quantum of edible oil.**
- A. If statement I is the cause and statement II is its effect;
- B. If statement II is the cause and statement, I is its effect;
- C. If both the statements I and II are independent causes;
- D. If both the statements I and II are effects of independent causes;
- E. If both the statements I and II are effects of some common cause;

**Q.16**

- I. All the schools in the area had to be kept closed for most part of the week.**
- II. Many parents have withdrawn their children from the local schools.**
- A. If statement I is the cause and statement II is its effect;
- B. If statement II is the cause and statement, I is its effect;
- C. If both the statements I and II are independent causes;
- D. If both the statements I and II are effects of independent causes;
- E. If both the statements I and II are effects of some common cause;

**Q.17**

- I. The Government has imported large quantities of sugar as per trade agreement with other countries.**
- II. The prices of sugar in the domestic market have fallen sharply in the recent months.**
- A. If statement I is the cause and statement II is its effect;
- B. If statement II is the cause and statement, I is its effect;
- C. If both the statements I and II are independent causes;
- D. If both the statements I and II are effects of independent causes;
- E. If both the statements I and II are effects of some common cause;



Q.18

- I. There has been an increase in the underground water level column at all places in Lahore due to the last year's monsoon rains.
  - II. Most of the trains were cancelled last year due to water-logging on the tracks.
- A. If statement I is the cause and statement II is its effect;
  - B. If statement II is the cause and statement, I is its effect;
  - C. If both the statements I and II are independent causes;
  - D. If both the statements I and II are effects of independent causes;
  - E. If both the statements I and II are effects of some common cause;

Q.19

- I. Majority of the students in the college expressed their opinion against the college authority's decision to break away from the university and become autonomous.
  - II. The university authorities have expressed their inability to provide grants to its constituent colleges.
- A. If statement I is the cause and statement II is its effect;
  - B. If statement II is the cause and statement, I is its effect;
  - C. If both the statements I and II are independent causes;
  - D. If both the statements I and II are effects of independent causes;
  - E. If both the statements I and II are effects of some common cause;

Q.20

- I. The State Bank of Pakistan has recently put restrictions on few small banks in the country.
  - II. The small banks in the private and co-operative sector in Pakistan are not in a position to withstand the competitions of the bigger in the public sector.
- A. If statement I is the cause and statement II is its effect;
  - B. If statement II is the cause and statement, I is its effect;
  - C. If both the statements I and II are independent causes;
  - D. If both the statements I and II are effects of independent causes;
  - E. If both the statements I and II are effects of some common cause;



**PMC Topic-5****Q.21**

- I. For the past few months, the prices of spices have not been changed in the domestic market.
- II. For the past few months, the prices of spices have gone up substantially in the international market.
- A. If statement I is the cause and statement II is its effect;
- B. If statement II is the cause and statement, I is its effect;
- C. If both the statements I and II are independent causes;
- D. If both the statements I and II are effects of independent causes;
- E. If both the statements I and II are effects of some common cause;

**Q.22**

- I. Large number of people have fallen sick after consuming food in a marriage party in Sialkot.
- II. Major part of the locality of Sialkot is flooded due to a weeklong rain and has become inaccessible.
- A. If statement I is the cause and statement II is its effect;
- B. If statement II is the cause and statement, I is its effect;
- C. If both the statements I and II are independent causes;
- D. If both the statements I and II are effects of independent causes;
- E. If both the statements I and II are effects of some common cause;

**Q.23**

- I. Today's life of IT professionals is hectic, fast, demanding and result oriented so, it leads to a stressful situation.
- II. Whether it is IT professionals or in any other profession, heart disease is increasing day by day.
- A. If statement I is the cause and statement II is its effect;
- B. If statement II is the cause and statement, I is its effect;
- C. If both the statements I and II are independent causes;
- D. If both the statements I and II are effects of independent causes;
- E. If both the statements I and II are effects of some common cause;



Q.24

- I. The Punjab University has instructed all the colleges under its jurisdiction to ban smoking inside the college premises as well as in the hostels.
  - II. Majority of the parents signed a joint petition and are complaining against the open environment for students in colleges.
- A. If statement I is the cause and statement II is its effect;
  - B. If statement II is the cause and statement, I is its effect;
  - C. If both the statements I and II are independent causes;
  - D. If both the statements I and II are effects of independent causes;
  - E. If both the statements I and II are effects of some common cause;

Q.25

- I. Majority of Karachi citizens have decided to protest against the construction of a government office instead of a park.
  - II. There are no parks in that locality.
- A. If statement I is the cause and statement II is its effect;
  - B. If statement II is the cause and statement, I is its effect;
  - C. If both the statements I and II are independent causes;
  - D. If both the statements I and II are effects of independent causes;
  - E. If both the statements I and II are effects of some common cause;

Q.26

- I. The government has reduced the petrol prices by Rs. 4 a week after increasing the prices by Rs. 8.
  - II. The tax on petrol imports has dropped marginally during the week.
- A. If statement I is the cause and statement II is its effect;
  - B. If statement II is the cause and statement, I is its effect;
  - C. If both the statements I and II are independent causes;
  - D. If both the statements I and II are effects of independent causes;
  - E. If both the statements I and II are effects of some common cause;



**PMC Topic-5****Q.27**

- I. Commissionerate police Karachi has decided to increase patrolling in the evening times.
- II. In Karachi, the number of incidents of petty crimes like theft has been decreased.
- A. If statement I is the cause and statement II is its effect;
- B. If statement II is the cause and statement, I is its effect;
- C. If both the statements I and II are independent causes;
- D. If both the statements I and II are effects of independent causes;
- E. If both the statements I and II are effects of some common cause;

**Q.28**

- I. Special tax package has been announced for the new industries by the state government.
- II. The state government had hiked different taxes for all industrial activities in the state last year.
- A. If statement I is the cause and statement II is its effect;
- B. If statement II is the cause and statement, I is its effect;
- C. If both the statements I and II are independent causes;
- D. If both the statements I and II are effects of independent causes;
- E. If both the statements I and II are effects of some common cause;

**Q.29**

- I. "Henceforth; no farmer will be given immediate credit"- Said the local credit cooperative society chairman.
- II. From the society fund, many partners have withdrawn their amount of money.
- A. If statement I is the cause and statement II is its effect;
- B. If statement II is the cause and statement, I is its effect;
- C. If both the statements I and II are independent causes;
- D. If both the statements I and II are effects of independent causes;
- E. If both the statements I and II are effects of some common cause;



Q.30

- I. There had been a huge rush to the nearby Park on the 15th of the month.
- II. The authority had decided to shut down the park for 3 weeks starting from the 16th of previous month.

- A. If statement I is the cause and statement II is its effect;
- B. If statement II is the cause and statement, I is its effect;
- C. If both the statements I and II are independent causes;
- D. If both the statements I and II are effects of independent causes;
- E. If both the statements I and II are effects of some common cause;

Q.31

- I. Despite mere infrastructure, Mirpur has produced some great talents in athletics.
- II. By seeing the talent, the union cabinet has proposed to build a sports university in Mirpur.

- A. If statement I is the cause and statement II is its effect;
- B. If statement II is the cause and statement, I is its effect;
- C. If both the statements I and II are independent causes;
- D. If both the statements I and II are effects of independent causes;
- E. If both the statements I and II are effects of some common cause;

Q.32

- I. In local area, many people have been affected with dengue.
- II. Doctors have decided to close their private clinic for some days.

- A. If statement I is the cause and statement II is its effect;
- B. If statement II is the cause and statement, I is its effect;
- C. If both the statements I and II are independent causes;
- D. If both the statements I and II are effects of independent causes;
- E. If both the statements I and II are effects of some common cause;



**PMC Topic-5****Q.33**

- I. Recently Punjab government has reduced the tuition fee structure of engineering colleges under UET.**
- II. Due to high fee structure and low placement, the number of students enrolling in engineering is being reduced day by day.**
- A. If statement I is the cause and statement II is its effect;  
B. If statement II is the cause and statement, I is its effect;  
C. If both the statements I and II are independent causes;  
D. If both the statements I and II are effects of independent causes;  
E. If both the statements I and II are effects of some common cause;

**Q.34**

- I. It was very cold today.**
- II. The weather channel has reported that temperature will drop.**
- A. If statement I is the cause and statement II is its effect;  
B. If statement II is the cause and statement, I is its effect;  
C. If both the statements I and II are independent causes;  
D. If both the statements I and II are effects of independent causes;  
E. If both the statements I and II are effects of some common cause;

**Q.35**

- I. Tom was not granted a visa to the UK.**
- II. Tom's flight to Manchester was delayed by at least 10 hours.**
- A. If statement I is the cause and statement II is its effect;  
B. If statement II is the cause and statement, I is its effect;  
C. If both the statements I and II are independent causes;  
D. If both the statements I and II are effects of independent causes;  
E. If both the statements I and II are effects of some common cause;



Q.36

I. John's movie has crossed the 300 crores mark at the box-office.

II. His movie is nominated for the Oscars.

- A. If statement I is the cause and statement II is its effect;
- B. If statement II is the cause and statement, I is its effect;
- C. If both the statements I and II are independent causes;
- D. If both the statements I and II are effects of independent causes;
- E. If both the statements I and II are effects of some common cause;

Q.37

I. Ali has not paid the rent.

II. He has not arrived yet.

- A. If statement I is the cause and statement II is its effect;
- B. If statement II is the cause and statement, I is its effect;
- C. If both the statements I and II are independent causes;
- D. If both the statements I and II are effects of independent causes;
- E. If both the statements I and II are effects of some common cause;

Q.38

I. There is a sharp decline in the production of rice this season.

II. The government has decided to increase the import of rice.

- A. If statement I is the cause and statement II is its effect;
- B. If statement II is the cause and statement, I is its effect;
- C. If both the statements I and II are independent causes;
- D. If both the statements I and II are effects of independent causes;
- E. If both the statements I and II are effects of some common cause;

Q.39

I. Jack studies in standard five.

II. Jack failed in standard five.

- A. If statement I is the cause and statement II is its effect;
- B. If statement II is the cause and statement, I is its effect;
- C. If both the statements I and II are independent causes;
- D. If both the statements I and II are effects of independent causes;
- E. If both the statements I and II are effects of some common cause;



## PMC Topic-5

Q.40

I. Each month I have had unexpected expenditures.

II. Last month I got a new phone for Rs 5000.

- A. If statement I is the cause and statement II is its effect;  
 B. If statement II is the cause and statement, I is its effect;  
 C. If both the statements I and II are independent causes;  
 D. If both the statements I and II are effects of independent causes;  
 E. If both the statements I and II are effects of some common cause;

## ANSWER KEY»»

1	A	11	B	21	C	31	A
2	A	12	D	22	D	32	D
3	B	13	D	23	E	33	B
4	A	14	B	24	B	34	E
5	A	15	A	25	B	35	D
6	B	16	D	26	B	36	E
7	B	17	A	27	A	37	D
8	A	18	E	28	B	38	A
9	B	19	B	29	B	39	D
10	B	20	B	30	B	40	D



## INTRODUCTION

In this section of logical deduction, the question consists of a brief passage (usually a report containing certain data regarding some social or economic problem), followed by certain inferences based on it. The student is required to analyze the contents (or data) of the passage and grasp the desirable facts from it. Then, student has to consider each of the given inferences in the context of the given passage, decide upon its degree of truth or falsity and then choose the best alternative provided accordingly.

### Questions 1 to 5

Though the State cultivates only 3.2 lakh tons of mangoes, they are of premium quality and with mangoes becoming second most consumed fruit in the world after grapes, the government has been trying exporting it through sea route which is cheaper. An experiment which was done in this regard last year has proved successful.

**Q.1 Quality of mangoes is an important factor in exports.**

- A. Definitely true
- B. Probably true
- C. Data inadequate
- D. Probably false
- E. Definitely false

**Q.2 The State also exports good quality grapes.**

- A. Definitely true
- B. Probably true
- C. Data inadequate
- D. Probably false
- E. Definitely false

**Q.3 There are some problems in exporting mangoes through sea route.**

- A. Definitely true
- B. Probably true
- C. Data inadequate
- D. Probably false
- E. Definitely false

**Q.4 Most of the other exports are through sea routes which is cheaper.**

- A. Definitely true
- B. Probably true
- C. Data inadequate
- D. Probably false
- E. Definitely false



## PMC Topic-6

**Q.5** The State also cultivates a large number of medium quality of mangoes.

- A. Definitely true
- B. Probably true
- C. Data inadequate
- D. Probably false
- E. Definitely false

**Question 6 to 9**

A tiger, when killing its natural prey, which it does either by stalking or lying-in wait for it, depends for the success of its attack on its speed and, to a lesser extent, on the condition of its teeth and claws. When, therefore, a tiger is suffering from one or more painful wounds or when its teeth are missing or defective and its claws worn down, and it is unable to catch animals it has been accustomed to eating, it is driven by the necessity to killing human beings.

**Q.6** Human beings are the natural prey of tigers.

- A. Definitely true
- B. Probably true
- C. Data inadequate
- D. Probably false
- E. Definitely false

**Q.7** Sharp claws are needed by the tigers to kill animals in the forest.

- A. Definitely true
- B. Probably true
- C. Data inadequate
- D. Probably false
- E. Definitely false

**Q.8** Old age propels tigers to take to man eating.

- A. Definitely true
- B. Probably true
- C. Data inadequate
- D. Probably false
- E. Definitely false

**Q.9** Tiger kills man only when it has been incapacitated through wounds.

- A. Definitely true
- B. Probably true
- C. Data inadequate
- D. Probably false
- E. Definitely false



A radical new surgery procedure, laughed at not long ago, is holding out fresh hope for patients of cardiac myopathy, or enlargement of the heart. The technique, now in Pakistan, allows patients to go home two weeks after the operation, to lead a near-normal sedentary life. Cardiac myopathy is a condition that has a variety of causative factors. An attack from one of the 20 identified viruses, parasite infection, long-term alcohol abuse and blood pressure could bring it on, and in rare cases, it could follow child birth and is even known to run in families. The condition is marked by an increase in the size of the heart's chambers and a decrease in the efficiency of pumping.

**Q.10 Cardiac myopathy is hereditary.**

- |                     |                   |
|---------------------|-------------------|
| A. Definitely true  | B. Probably true  |
| C. Data inadequate  | D. Probably false |
| E. Definitely false |                   |

**Q.11 The new technique was never tried in Pakistan in the past.**

- |                     |                   |
|---------------------|-------------------|
| A. Definitely true  | B. Probably true  |
| C. Data inadequate  | D. Probably false |
| E. Definitely false |                   |

**Q.12 The cardiac myopathy slows down the heartbeat.**

- |                     |                   |
|---------------------|-------------------|
| A. Definitely true  | B. Probably true  |
| C. Data inadequate  | D. Probably false |
| E. Definitely false |                   |

**Q.13 Earlier the patients suffering from cardiac myopathy were required to travel abroad for such operation.**

- |                     |                   |
|---------------------|-------------------|
| A. Definitely true  | B. Probably true  |
| C. Data inadequate  | D. Probably false |
| E. Definitely false |                   |

**Q.14 The efficiency of the heart is inversely proportional to the size of the heart.**

- |                     |                   |
|---------------------|-------------------|
| A. Definitely true  | B. Probably true  |
| C. Data inadequate  | D. Probably false |
| E. Definitely false |                   |



## PMC Topic-6

## Question 15 to 18

Primary education in Sindh is in a poor shape. Pupils in over 50 percent of the schools read in the open throughout the year. Over six million children born to lower income group parents remain unlettered. Not even one percent of the 63,000 primary schools have facilities of furniture, toilet, drinking water and games. 3113 new teachers have been appointed in the current financial year out of which 2747 are women. Now each of the 13,270 primary schools have at least two teachers.

**Q.15 630 primary schools in Sindh have all the facilities like furniture, toilet, drinking water, games.**

A. Definitely true

B. Probably true

C. Data inadequate

D. Probably false

E. Definitely false

**Q.16 In Sindh, 90 percent of the primary teachers are women.**

A. Definitely true

B. Probably true

C. Data inadequate

D. Probably false

E. Definitely false

**Q.17 In Sindh, 50 percent of the children are illiterate.**

A. Definitely true

B. Probably true

C. Data inadequate

D. Probably false

E. Definitely false

**Q.18 A large number of primary schools in Sindh are one teacher schools.**

A. Definitely true

B. Probably true

C. Data inadequate

D. Probably false

E. Definitely false



The Government of Pakistan has urged to Provincial Governments to create more jobs opportunities for women. All-out efforts are to be made to have more training facilities for women so that they can be gainfully employed. It is in pursuance of the recent policy decisions taken by the Government to make women self-reliant. The Provincials have been asked to end discrimination against the fair sex so far new jobs are concerned. The same wage for women workers should also be strictly adhered to, it has been emphasized.

Q.19 More job opportunities are being created for women to eradicate poverty among them.

- A. Definitely true
- B. Probably true
- C. Data inadequate
- D. Probably false
- E. Definitely false

Q.20 The Government emphasizes on equality of men and women.

- A. Definitely true
- B. Probably true
- C. Data inadequate
- D. Probably false
- E. Definitely false

Q.21 The Pakistani Government has arranged for proper education of women so that they can get good jobs.

- A. Definitely true
- B. Probably true
- C. Data inadequate
- D. Probably false
- E. Definitely false

Q.22 Women should be given higher wages than men to make them self-reliant.

- A. Definitely true
- B. Probably true
- C. Data inadequate
- D. Probably false
- E. Definitely false



**PMC Topic-6****Question 23 to 26**

In the overall economy of Pakistan, agriculture is the largest sector of economic activity. It plays a crucial role in the country's economic development by providing food to its people and raw materials to industry. It accounts for the largest share to the national income. The share of the various agricultural commodities, animal husbandry and ancillary activities has been more than 40 percent since independence. During the decade of the fifties, it actually contributed about half of the national output.

**Q.23 Agriculture is the mainstay of Pakistan economy.**

- A. Definitely true
- B. Probably true
- C. Data inadequate
- D. Probably false
- E. Definitely false

**Q.24 Agriculture is the only source of national income in Pakistan.**

- A. Definitely true
- B. Probably true
- C. Data inadequate
- D. Probably false
- E. Definitely false

**Q.25 The contribution of agriculture to Pakistan economy rose substantially after independence.**

- A. Definitely true
- B. Probably true
- C. Data inadequate
- D. Probably false
- E. Definitely false

**Q.26 Agriculture contributes to national income more than all other activities put together.**

- A. Definitely true
- B. Probably true
- C. Data inadequate
- D. Probably false
- E. Definitely false



The water resources of our country are very much underutilized. The main reason of this underutilization is the lack of capital and technology. A large portion of our water resources is wasted due to floods and unwise use of water for irrigation as well as domestic purposes. We can make full use of our water resources by building dams on rivers and by adopting policy of awareness among people not to waste water.

**Q.27 Our country has large areas to be irrigated and much water is wasted.**

- |                     |                   |
|---------------------|-------------------|
| A. Definitely true  | B. Probably true  |
| C. Data inadequate  | D. Probably false |
| E. Definitely false |                   |

**Q.28 Building of dams is an essential step in the conservation of water resource.**

- |                     |                   |
|---------------------|-------------------|
| A. Definitely true  | B. Probably true  |
| C. Data inadequate  | D. Probably false |
| E. Definitely false |                   |

**Q.29 Occurrence of floods adds to the water resources.**

- |                     |                   |
|---------------------|-------------------|
| A. Definitely true  | B. Probably true  |
| C. Data inadequate  | D. Probably false |
| E. Definitely false |                   |

**Q.30 Some people do not use water resources in a judicious way.**

- |                     |                   |
|---------------------|-------------------|
| A. Definitely true  | B. Probably true  |
| C. Data inadequate  | D. Probably false |
| E. Definitely false |                   |

**Q.31 The country does not have enough funds to develop water resources.**

- |                     |                   |
|---------------------|-------------------|
| A. Definitely true  | B. Probably true  |
| C. Data inadequate  | D. Probably false |
| E. Definitely false |                   |



**PMC Topic-6****Questions 32 to 36**

Pakistan needs higher investment in the port sector and still lags far behind the international ports in container traffic, though there has been considerable growth in this segment over the past few years. There is a need to continually benchmark Pakistani ports against the best ports worldwide and continue to engage in policy efforts so as to attain prices per container of port services which are the lowest in the world. The average turn-around time for ships docking at most of the ports in Pakistan has been falling for the past three years. However, pre-berthing time has been marginally increasing over the years.

- Q.32 The best port in the world is located in the United Provincials of America.**
- A. Definitely true  
B. Probably true  
C. Data inadequate  
D. Probably false  
E. Definitely false
- Q.33 Pakistani ports have not been graded so far on the international standard.**
- A. Definitely true  
B. Probably true  
C. Data inadequate  
D. Probably false  
E. Definitely false
- Q.34 Pakistani ports need considerable development to match with the best ports in the world.**
- A. Definitely true  
B. Probably true  
C. Data inadequate  
D. Probably false  
E. Definitely false
- Q.35 Pre-berthing time is gradually deceasing over the years.**
- A. Definitely true  
B. Probably true  
C. Data inadequate  
D. Probably false  
E. Definitely false
- Q.36 Pakistani ports offer the lowest price per container as service charges.**
- A. Definitely true  
B. Probably true  
C. Data inadequate  
D. Probably false  
E. Definitely false



Urban services have not expanded fast enough to cope with urban expansion. Low investment allocations have tended to be underspent. Both public (e.g. water and sewage) and private (e.g. low-income area housing) infrastructure quality has declined. This impact of the environment in which children live and the supporting services available to them when they fall ill, seems clear. The decline in average food availability and the rise in absolute poverty point in the same unsatisfactory direction.

**Q.37 There is nothing to boast about urban services.**

- A. Definitely true
- B. Probably true
- C. Data inadequate
- D. Probably false
- E. Definitely false

**Q.38 Birth rate is high in urban areas as compared to rural areas.**

- A. Definitely true
- B. Probably true
- C. Data inadequate
- D. Probably false
- E. Definitely false

**Q.39 The environment around plays an important role on the health status.**

- A. Definitely true
- B. Probably true
- C. Data inadequate
- D. Probably false
- E. Definitely false

**Q.40 Through adequate provisions of funds were made but they remained unspent.**

- A. Definitely true
- B. Probably true
- C. Data inadequate
- D. Probably false
- E. Definitely false



## PMC Topic-6

## Question 41 to 45

Our country needs about nine to ten percent of yearly increase in power capacity. That means from the present 86000 MW we have today, we require an additional 8000 to 10000 MW every year. The private industries or foreigners may contribute by 1000 MW to 2000 MW. So, basically 90 percent of the capacity addition will have to be done by public sector companies. But government cannot continuously give money for this. This means that the tariff has to be regulated to generate money, not based on the cost of 25 years ago. If this happens, optional utilization of power will take place. It will not be wasted.

**Q.41** Presently some power is being wasted as the tariff is low.

- A. Definitely true
- B. Probably true
- C. Data inadequate
- D. Probably false
- E. Definitely false

**Q.42** The public sector enterprises in power generation have done a commendable job.

- A. Definitely true
- B. Probably true
- C. Data inadequate
- D. Probably false
- E. Definitely false

**Q.43** The private industries are not willing to install big plants to generate power.

- A. Definitely true
- B. Probably true
- C. Data inadequate
- D. Probably false
- E. Definitely false

**Q.44** There is likelihood of increase in power tariffs in future.

- A. Definitely true
- B. Probably true
- C. Data inadequate
- D. Probably false
- E. Definitely false



Q.45 Once we attain 10 percent increase in the present power capacity for few years, we will have no problem.

- A. Definitely true
- B. Probably true
- C. Data inadequate
- D. Probably false
- E. Definitely false

# ANSWER KEY»

1	A	11	A	21	C	31	A	41	C
2	C	12	A	22	E	32	C	42	D
3	E	13	C	23	A	33	C	43	E
4	B	14	A	24	E	34	A	44	A
5	E	15	E	25	A	35	E	45	A
6	E	16	C	26	A	36	E		
7	A	17	C	27	C	37	A		
8	C	18	E	28	A	38	C		
9	A	19	E	29	E	39	A		
10	B	20	A	30	A	40	E		





# MISCELLANEOUS PROBLEMS

## PRACTICE EXERCISE

- Q.1** If 3 cats can kill 3 rats in 3 minutes, how long will it take 100 cats to kill 100 rats?
- A. 3  
B. 100  
C. 50  
D. None of these
- Q.2** The number of degrees through which the hour hand of a clock moves in 2 hours & 12 minutes is.
- A. 66  
B. 72  
C. 732  
D. 96
- Q.3** What is the smallest number of ducks that could swim in this formation – two ducks in front of a duck, two ducks behind a duck and a duck between two ducks?
- A. 3  
B. 5  
C. 7  
D. 9
- Q.4** What is the product of all the numbers in the dial of a telephone?
- A. 1,58,480  
B. 1,59,450  
C. 1,59,480  
D. None of these
- Q.5** In a cage there are Rabbits and Pigeons. They have 20 heads and 48 feet. How many Rabbits are there?
- A. 3  
B. 4  
C. 5  
D. 6
- Q.6** A and B are sisters. C and D are brothers. A is the mother of D, what is the relation of B to C.
- A. Mother  
B. Mother-in-law  
C. Aunt  
D. Sister-in-law



## Miscellaneous problems

- Q.7 Abdullah's mother is sister of Ajmal's brother. What is Abdullah to Ajmal?
- A. Nephew  
B. Uncle  
C. Father  
D. Brother in law
- Q.8 A said to B, My mother gave birth to a child, who was neither my brother nor my sister. Can you guess who was the child?
- A. A  
B. B  
C. A's brother  
D. B's sister
- Q.9 A is the father of B, but B is not A's daughter. Establish relationship of B with A.
- A. Son  
B. Nephew  
C. Daughter  
D. None
- Q.10 A child was accompanying a woman. On being asked who the boy was, the woman said, His mother was the only daughter of my mother. How has the boy related to the woman?
- A. Son  
B. Brother  
C. Nephew  
D. None
- Q.11 It would be Thursday two days after tomorrow. What was two days before yesterday?
- A. Saturday  
B. Monday  
C. Friday  
D. Wednesday
- Q.12 The 15<sup>th</sup> of the month falls on the day preceding Sunday, on what day will the 6<sup>th</sup> of the month fall?
- A. Friday  
B. Saturday  
C. Thursday  
D. Sunday



- Q.13** If 20<sup>th</sup> of February of a leap year falls two days preceding a Saturday, what day of the week will dawn on 3<sup>rd</sup> of next March?

- A. Tuesday  
B. Wednesday  
C. Friday  
D. None

- A. Sunday  
B. Monday  
C. Saturday  
D. Thursday

- A. Wednesday  
B. Monday  
C. Tuesday  
D. None

- A. 11:30  
B. 11:15  
C. 11:05  
D. 11:07

- A. South-East  
B. North-West  
C. South-west  
D. South

- A. 5 miles  
B. 4 miles  
C. 6 miles  
D. 11 miles



## Miscellaneous problems

- Q.19 A and B start walking in opposite directions. A walked 2 miles & B 3 miles. Then each turned right & walked 4 miles. Then they turned right. A walked 3 & B 2 miles. How far distant apart are they at the end?
- A. 5 miles  
B. 7 miles  
C. 8 miles  
D. 10 miles
- Q.20 A man travels 7 miles eastwards. Then turns right & travels three miles & again turns right & travels 11 miles. How far is he from starting point?
- A. 5  
B. 10  
C. 15  
D. 20
- Q.21 A man travels 2 miles, turns left & travels another 4 miles & then turns right travels yet another mile. How far is he from starting point?
- A. 3 miles  
B. 5 miles  
C. 7 miles  
D. 9 miles
- Q.22 A mango tree is as tall as a coconut tree. A banana tree is shorter than a palm tree. A guava tree is shorter than the banana tree but taller than mango tree, which is the tallest?
- A. Mango  
B. Guava  
C. Coconut  
D. Palm
- Q.23 Five bags are lying in a pile one above the other. If A is above B, C is above D but below E and D is above A, which bag is in the middle.
- A. D  
B. E  
C. A  
D. B
- Q.24 A man starts climbing a Hill. Every minute he ascends 20 yard but slips down 5 yards. How long will he take to ascend a point 80 yards high?
- A. 5 minutes  
B. 5 minutes 20 seconds  
C. 6 minutes  
D. 6 minutes 30 seconds



**Q.25** Choose the word which is least like the other words in the group.

- |            |             |
|------------|-------------|
| A. January | B. May      |
| C. July    | D. November |

**Q.26** Choose out the odd one.

- |            |             |
|------------|-------------|
| A. Tomato  | B. Cucumber |
| C. Brinjal | D. Carrot   |

**Q.27** Choose out the odd one.

- |             |              |
|-------------|--------------|
| A. Day      | B. Fortnight |
| C. Calendar | D. Month     |

**Q.28** Choose the word which is least like the other words in the group.

- |           |          |
|-----------|----------|
| A. Pistol | B. Sword |
| C. Gun    | D. Rifle |

**Q.29** Choose out the odd one.

- |           |           |
|-----------|-----------|
| A. Mother | B. Friend |
| C. Sister | D. Father |

**Q.30** Choose out the odd one.

- |           |              |
|-----------|--------------|
| A. Ladder | B. Staircase |
| C. Bridge | D. Escalator |

In these questions, the letters in a word are replaced by certain other letters according to a specific rule to form its code. The candidate is required to detect the coding pattern/rule and answer the questions accordingly.

**Q.31** In a certain code, TEACHER is written as VGCEJGT. How is CHILDREN written in that code?

- |             |             |
|-------------|-------------|
| A. EJKNEGTP | B. EGKNFITP |
| C. EJKNFGTO | D. EJKNFTGP |



- Q.38 If 'bat' is 'racket', 'racket' is 'football', 'football' is 'shuttle' 'shuttle' is 'ludo' and 'ludo' is 'carrom', what is cricket played with?
- A. Racket  
B. Football  
C. Bat  
D. Shuttle
- 
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- Q.39 If 'sky' is 'star', 'star' is 'cloud', 'cloud' is 'earth', 'earth' is 'tree' and 'tree' is 'book', then where do the birds fly?
- A. Cloud B. Sky  
C. Star D. Data inadequate
- Q.40 If NARGRUED is the code for GRANDEUR, which word is coded as SERPEVRE?
- A. PERSEVER B. PRESEVER  
C. PREVERSE D. PRESERVE
- Q.41 In a certain code, RAIN is written as 8\$%6 and MORE is written as 7#8@. How is REMAIN written in that code?
- A. #@7\$%6 B. #@&\$%6  
C. 7@#\$%6 D. 8@7\$%6
- Q.42 If REASON is coded as 5 and BELIEVED as 7, then what is the code for GOVERNMENT?
- A. 6 B. 8  
C. 9 D. 10
- Q.43 If DRIVER = 12, PEDESTRAIN = 20, ACCIDENT = 16, then CAR = ?
- A. 3 B. 6  
C. 8 D. 10
- Q.44 In a certain system of coding, the word STATEMENT is written as TNEMETATS. In the same system of coding, what should be the code for the word POLITICAL?
- A. LACITILOP B. LCATILIOP  
C. OPILITACL D. None of these



Q.45 In a certain code, STOVE is written as FNBLK, then how will VOTES be written in the same code?

A. FLKBN

B. LBNKF

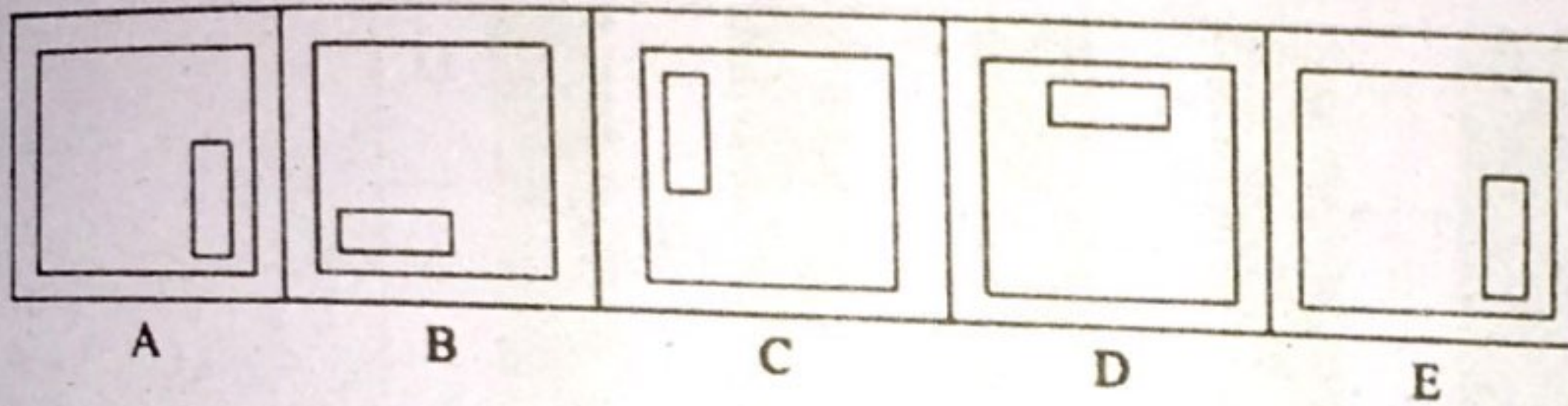
C. LKNBF

D. LNBKF

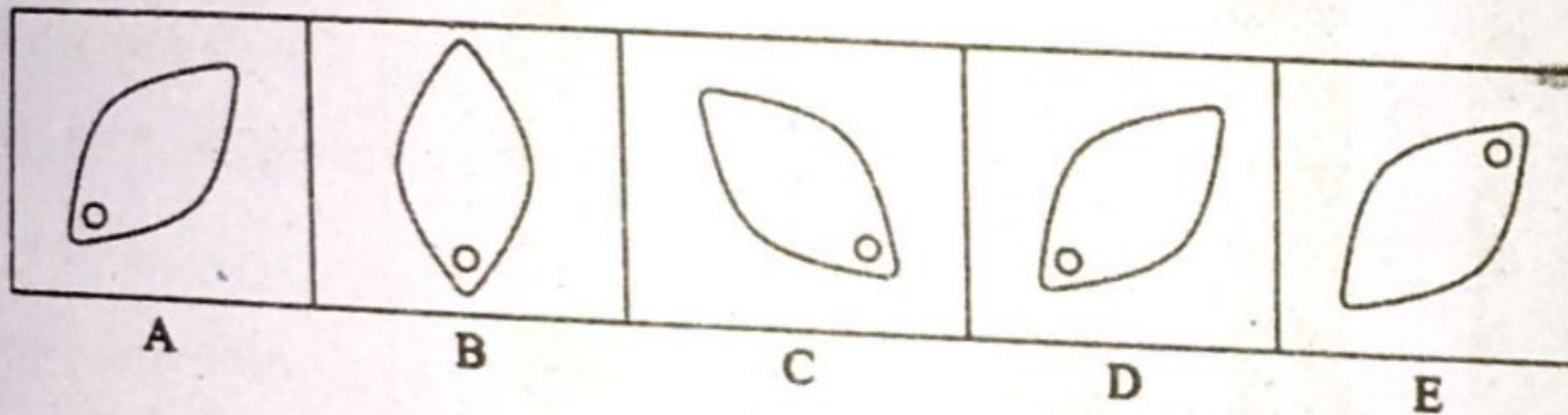
Direction:

Four of the five figures marked A, B, C, D and E are same in some way or the other and one is different from the rest. You have to choose the figure which is different (odd).

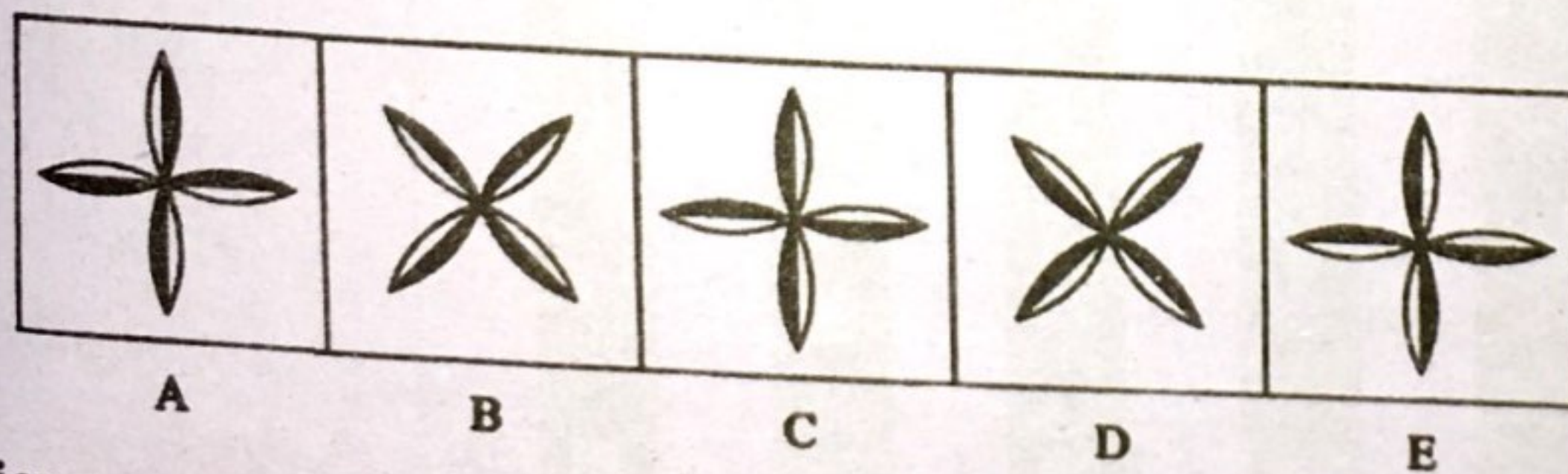
Q.46



Q.47



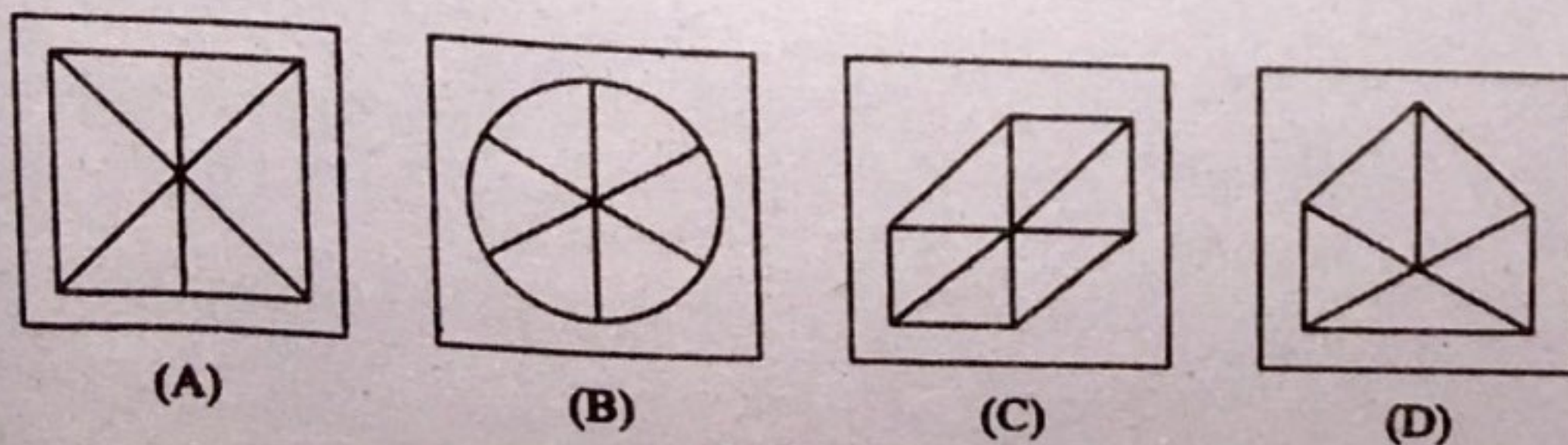
Q.48



Directions:

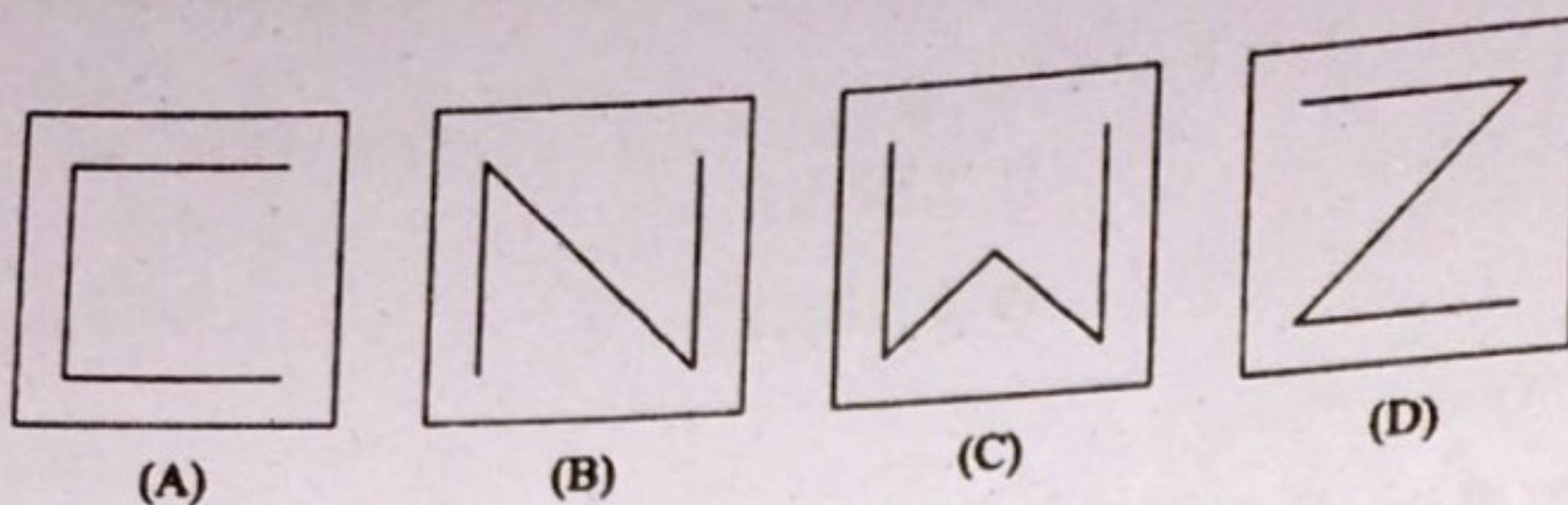
In the following questions, select the one which is different from the other three figures.

Q.49





Q.50



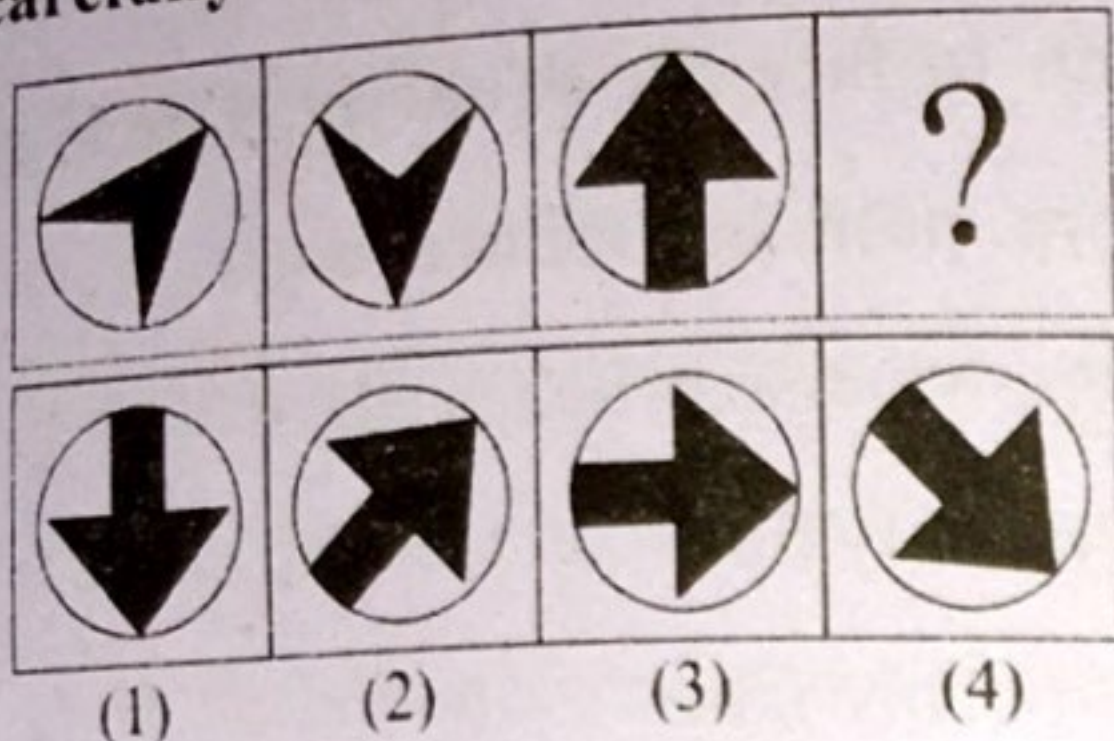
# ANSWER KEY»

1	A	11	C	21	B	31	D	41	D
2	A	12	C	22	D	32	B	42	C
3	A	13	A	23	A	33	C	43	B
4	D	14	C	24	A	34	D	44	A
5	B	15	C	25	D	35	B	45	B
6	C	16	C	26	D	36	B	46	D
7	A	17	C	27	C	37	B	47	D
8	A	18	A	28	B	38	A	48	C
9	A	19	C	29	B	39	C	49	D
10	A	20	A	30	C	40	D	50	C



# POST-ASSESSMENT TEST >>

Look carefully at the sequence of symbols to find the pattern. Select correct pattern.



Q.1

A. 1

B. 2

C. 3

D. 4

Q.2 Find the missing term: 2Z5, 7Y7, 14X9, 23W11, 34V13, ?

A. 27U24

B. 45U15

C. 47U15

D. 47V14

Q.3 Statement:

All huts are mansions. All mansions are temples.

Conclusions:

I) Some temples are huts.

II) Some temples are mansions.

Which of the following is most appropriate in the above case?

A. Only I

B. Only II

C. I and II are inappropriate

D. I and II are appropriate.

Q.4 Statement:

Some pearls are stones. Some stones are diamonds. No diamond is a gem.

Conclusions:

I) Some gems are pearls.

II) Some gems are diamonds.

III) No gem is a diamond.

IV) No gem is a pearl.

A. Only I

B. Only II

C. Only III

D. Only IV



**Q.5** The most empirical argument in favor of prayer is that it relieves the mind of tension, which is the natural concomitant of a life of hurry and worry. It neutralizes mental repressions and purifies the sub-consciousness. It releases an extra amount of hope and energy and thus enables a person to face life squarely. Life is not all sweetness, enjoyment and success; it is drudgery, pain and failure too.

I) There are some arguments for the benefits of prayer, which can be tested.

A. Definitely true

B. Probably true

C. Data inadequate

D. Probably false

E. Definitely false

**Q.6 Statement:**

The Finance Minister submits his resignation a month before the new budget is to presented in the Parliament.

**Courses of Action:**

I) The resignation should be accepted and another person should be appointed as the Finance Minister.

II) The resignation should not be accepted.

A. If only I is most appropriate

B. If only II is most appropriate

C. If either I or II is most appropriate

D. If neither I nor II is most appropriate

E. If both I and II are most appropriate

**Q.7 Statements:**

I) Ali could not attend the meeting held last month.

II) Heavy traffic on the Ferozpur road has become a problem every day.

A. Statement I is the cause and statement II is its effect.

B. Statement II is the cause and statement I is its effect.

C. Both the statements I and II are independent causes

D. Both the statements I and II are effects of independent causes

E. Both the statements I and II are effects of some common cause.



**Q.8 Statements:**

- I) The literacy rate in the district has been increasing for the last four years.  
 II) The district administration has conducted extensive training programme for the workers involved in the literacy drive.
- A. Statement I is the cause and statement II is its effect  
 B. Statement II is the cause and statement I is its effect  
 C. both the statements I and II are independent causes  
 D. Both the statements I and II are independent causes  
 E. Both the statements I and II are effects of some common cause.

**Questions 9-10:**

Five plays A, B, C, D and E are to be staged from Monday to Friday of a week. On each day, only one play will be staged, D or E should not be either the first or last to be staged. E should be immediately followed by C. B should be staged immediately after D. One play is staged between A and B.

**Q.9 Which is the first play to be staged?**

- A. A  
 B. B  
 C. C  
 D. Cannot be determined

**Q.10 Which play was staged on Wednesday?**

- A. A  
 B. B  
 C. Either B or C  
 D. Cannot be determined

**ANSWER KEY»»**

1	D	6	B
2	C	7	D
3	D	8	B
4	C	9	A
5	A	10	B